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EMPLOYMENT TRENDS IN GEORGIA BORDER COUNTIES

Saloua Sehili

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Andrew Young

School of Policy Studies

Introduction

There is evidence in the economics literature that neighboring geographic areas tend to have strong industrial linkages in the form of common production technologies and markets for many products and services (Krugman 1991; Hanson 1998). This evidence suggests that the Georgia economy is likely to be affected by economic conditions in neighboring states, namely Alabama, Florida, North Carolina, South Carolina, and Tennessee. Competition over new firm locations may spur competing states to implement new economic incentives to attract new businesses. If this happens, it is expected that employment in the border counties of the state adopting the incentives will increase relative to employment in the border counties of adjoining states. In fact, there has been concern in Georgia over the possible loss of industry due to new incentives being offered by Alabama and, especially, South Carolina.

This report focuses on employment trends in Georgia's and its neighboring states' border counties. The report addresses the issue of whether Georgia's border counties are losing employment to border counties in adjoining states. We find no evidence supporting the view that Georgia is losing employment.

Recent Employment Trends

Given that the aggressive economic development incentives offered by

Employment Trends in Georgia Border Counties

MAP 1. BORDER COUNTIES



Employment Trends in Georgia Border Counties

TABLE 1. MONTHLY EMPLOYMENT TRENDS IN BORDER COUNTIES

Name	Direction of Change^a	Employment Trend 1994-1997^b	Employment Trend 1998-1999^b	-
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Employment Trends in Georgia Border Counties

Name	Direction of Change ^a	Employment Trend 1994-1997 ^b	Employment Trend 1998-1999 ^b
BRYAN GA	-	3.40	-2.20
BULLOCH GA	+	-3.90	5.40
BURKE GA	+	-2.00	4.90
CALHOUN GA	-	4.20	4.00
CAMDEN GA	+	0.00	5.90
CARROLL GA	-	1.40	-0.91
CATOOSA GA	-	0.45	-4.20
CHARLTON GA	+	-2.00	5.90
CHATHAM GA	-	-0.30	-2.20
CHATTAHOOCHEE GA	-	2.70	-1.90
CHATTOOGA GA	+	-1.00	5.70
CLAY GA	0	1.52	1.52
CLINCH GA	+	0.00	5.60
COFFEE GA	+	1.70	5.50
COLQUITT GA	+	2.00	4.90
COLUMBIA GA	-	1.00	-3.10
COOK GA	+	1.00	4.80
COWETA GA	-	4.30	-0.91
DADE GA	-	0.00	-4.30
DECATUR GA	+	1.70	5.30
DOUGLAS GA	-	1.90	-0.91
EARLY GA	+	-2.30	4.10
ECHOLS GA	+	3.90	5.60
EFFINGHAM GA	-	3.30	-2.20
ELBERT GA	+	0.00	5.30
FANNIN GA	+	0.00	5.30
FLOYD GA	+	-0.82	5.50
FRANKLIN GA	+	2.40	5.30
FULTON GA	-	1.00	-0.91
GILMER GA	+	4.00	5.50
GLYNN GA	+	0.60	6.00
GORDON GA	+	0.00	5.60
GRADY GA	+	-1.40	4.70
HABERSHAM GA	+	0.00	5.40
HARALSON GA	+	-1.60	5.80
HARRIS GA	-	4.60	-1.90
HART GA	+	-1.70	5.30
HEARD GA	+	-1.90	5.50
JEFFERSON GA	+	-2.70	5.10
JENKINS GA	0	3.09	3.09
LANIER GA	0	4.18	4.18
LINCOLN GA	+	-1.50	5.60
LOWNDES GA	+	1.90	5.60
LUMPKIN GA	+	2.90	5.20
MCDUFFIE GA	-	-1.30	-3.10
MADISON GA	-	2.10	-2.90
MARION GA	+	-1.40	5.10
MERIWETHER GA	+	-0.90	5.20
MILLER GA	0	0.00	0.00
MITCHELL GA	+	2.10	4.90
MURRAY GA	+	-1.70	5.50
MUSCOGEE GA	-	0.97	-1.90
OGLETHORPE GA	+	0.97	5.60
PAULDING GA	-	5.30	-0.91

Employment Trends in Georgia Border Counties

Name	Direction of Change ^a	Employment Trend 1994-1997 ^b	Employment Trend 1998-1999 ^b
PIERCE GA	+	1.10	5.10
POLK GA	+	-1.70	5.60
RABUN GA	+	1.20	5.80
RANDOLPH GA	+	0.47	4.90
RICHMOND GA	-	-2.20	-3.10
SCREVEN GA	+	-3.70	5.20
SEMINOLE GA	+	0.00	4.60
STEPHENS GA	+	0.00	5.70
STEWART GA	+	1.40	5.00
TALBOT GA	+	0.00	5.20
TALIAFERRO GA	+	0.00	4.60
THOMAS GA	+	1.00	5.50
TOWNS GA	+	4.18	4.18
TROUP GA	+	1.70	5.90
UNION GA	+	2.20	4.90
WALKER GA	-	-0.33	-4.20
WARE GA	+	-0.54	5.50
WEBSTER GA	+	0.00	4.30
WHITE GA	+	2.10	5.90
WHITFIELD GA	+	0.00	5.80
WILKES GA	+	-0.39	5.00
CHEROKEE NC	+	1.00	8.10
CLAY NC	+	1.70	8.10
GRAHAM NC	+	-1.25	-1.25
JACKSON NC	-	1.80	1.70
MACON NC	-	2.90	0.00
SWAIN NC	0	0.00	0.00
TRANSYLVANIA NC	0	0.00	0.00
ABBEVILLE SC	-	0.00	-2.00
AIKEN SC	0	-0.93	-0.93
ALLENDALE SC	-	1.00	-1.40
ANDERSON SC	0	0.29	0.29
BAMBERG SC	0	-0.43	-0.43
BARNWELL SC	-	0.00	-2.90
BEAUFORT SC	0	2.81	2.81
COLLETON SC	-	0.00	-2.40
EDGEFIELD SC	0	-0.65	-0.65
GREENVILLE SC	0	0.33	0.33
GREENWOOD SC	-	0.70	-2.00
HAMPTON SC	-	0.65	-1.50
JASPER SC	0	2.14	2.14
LAURENS SC	0	-1.50	-1.50
LEXINGTON SC	0	1.16	1.16
MCCORMICK SC	-	0.95	-2.00
NEWBERRY SC	-	0.76	-2.80
OCONEE SC	-	0.00	-2.10
ORANGEBURG SC	-	0.00	-3.10
PICKENS SC	0	0.00	0.00
SALUDA SC	-	0.91	-2.80
BLEDSON TN	-	1.20	-2.20

Employment Trends in Georgia Border Counties

Name	Direction of Change ^a	Employment Trend 1994-1997 ^b	Employment Trend 1998-1999 ^b
BRADLEY TN	0	-0.58	-0.58
FRANKLIN TN	+	-1.80	0.88
GRUNDY TN	0	-0.79	-0.79
HAMILTON TN	+	-1.90	0.00
MCMINN TN	0	-0.59	-0.59
MARION TN	+	-1.60	0.00
MEIGS TN	0	0.29	0.29
MONROE TN	+	-1.30	3.10
POLK TN	0	-0.38	-0.38
RHEA TN	+	-2.20	3.10
SEQUATCHIE TN	+	-1.40	2.20

^aindicates a decrease in monthly growth trend between the two sub-periods; + indicates an increase, 0 indicates no change

^bCoefficients should be multiplied by 1.E-3.

Source: Indicated States' Departments of Labor.

for a county is not statistically significant, we assume no structural change in their employment growth pattern. In this case we report the growth rate for the entire period for each sub-period.

The results indicate that the only two states for which a majority of border counties experienced a structural change between the two sub-periods in growth rates are Georgia and Alabama. Map 2 and Map 3 show employment trends for the two sub-periods. Comparison of these two maps reveals that the majority of Georgia's border counties experienced greater employment growth rate in 1998-1999 relative to 1994-1997, while the opposite is true for Alabama and South Carolina's border counties. North Carolina did not have any counties with a significant increase in growth rate, while Tennessee and Florida counties experienced an increase in growth rate. Only a few of Georgia's border counties experienced no structural change in employment growth between the periods, with the growth rates being either zero or positive in both periods. These counties are Miller, Baker, and Clay on the southern Alabama border, Towns county on the North Carolina border, Jenkins County on the South Carolina border, and Lanier County on the Florida border. Except for Clay County, all these counties are second-layer border counties.

In Georgia, 19 border or near-border counties experienced a decrease in employment (relative to the US growth rate) in 1998-1999:

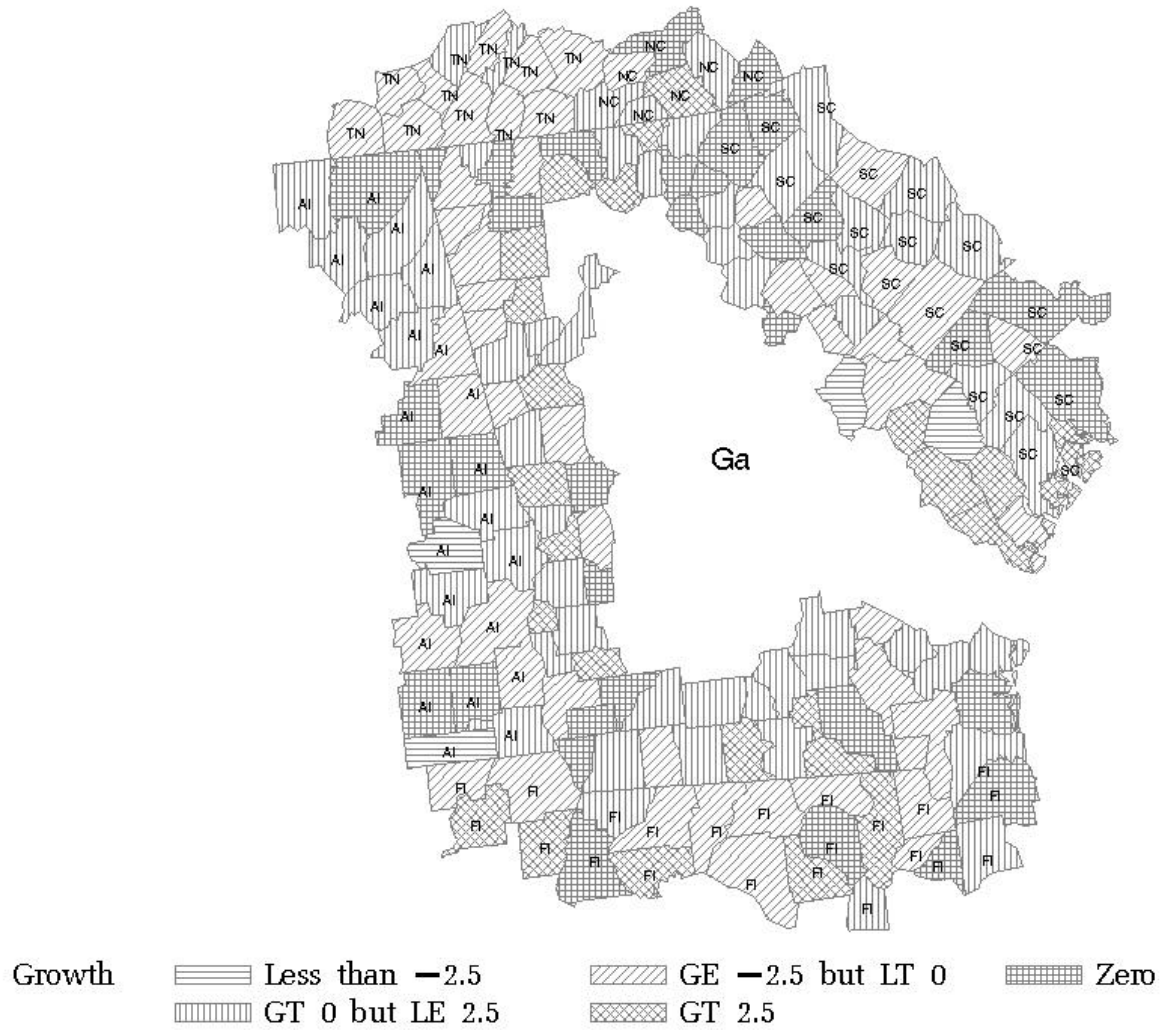
- Catoosa, Walker, and Dade on the Tennessee-Alabama border;
- Madison, McDuffie, Columbia, Richmond, Effingham, Chatham, and Bryan on the South Carolina border, and;
- Harris, Muscogee, Chattahoochee, Coweta, Carroll, Douglas, Fulton, Paulding, and Bartow on the Alabama border.

Along with Calhoun, these are the counties that experienced a decline in employment growth rates between the two sub-periods. It is worth noting that fifteen out of these nineteen counties are metropolitan counties, and the rest are contiguous to metropolitan counties. Furthermore, counties in each group are contiguous to one another.

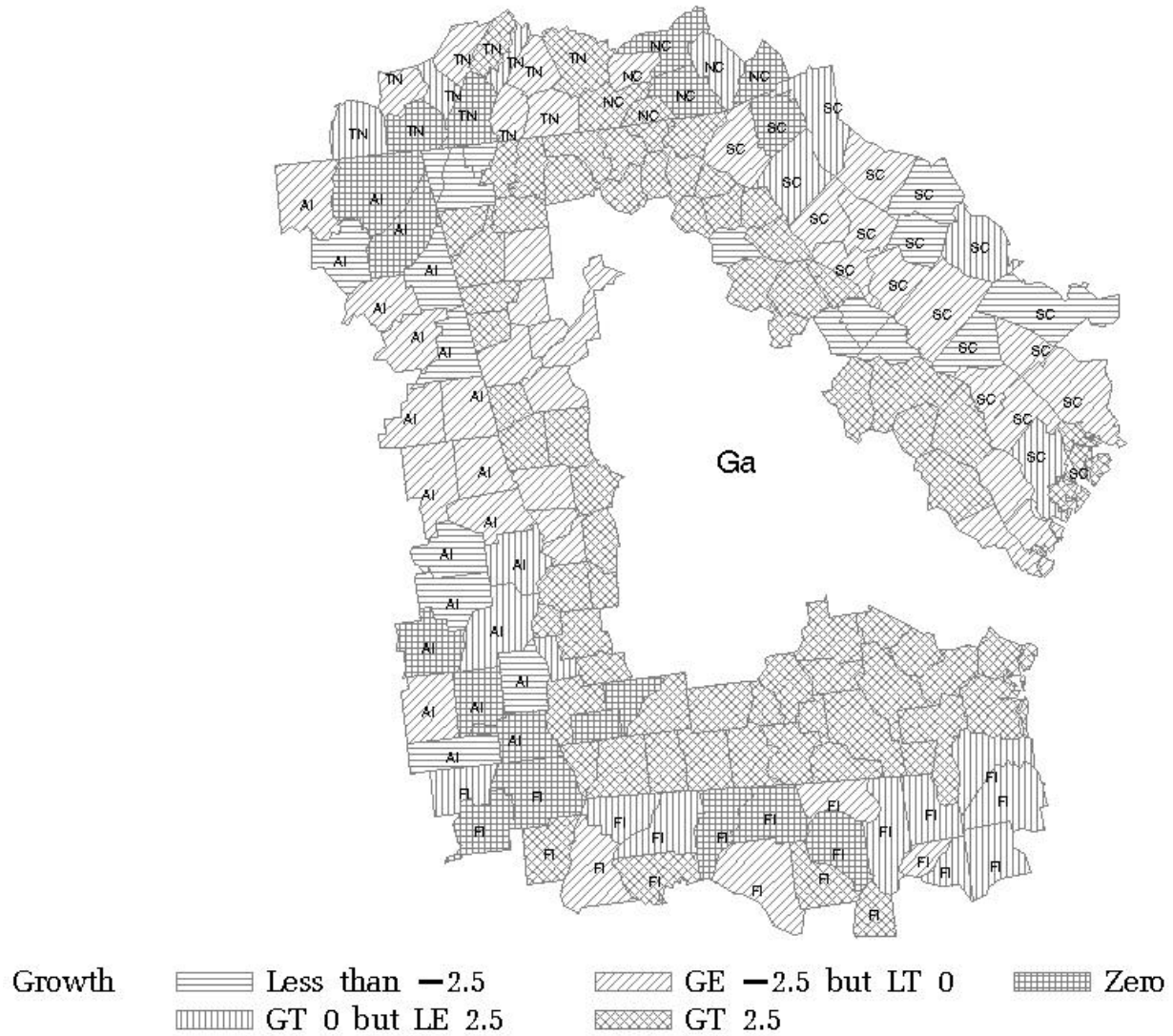
If employment loss in Georgia border county A is due to South Carolina's aggressive economic development policies, then we should expect to observe employment growth in a contiguous South Carolina's border county B. Although we

Employment Trends in Georgia Border Counties

MAP 2. EMPLOYMENT GROWTH IN BORDER COUNTIES (1994-1997)



MAP 3. EMPLOYMENT GROWTH IN BORDER COUNTIES (1998-1999)



have eliminated macroeconomic conditions as a cause of variation in employment by measuring county employment changes relative to national employment changes, observing such employment trends in counties A and B does not necessarily mean that county A is losing employment to county B. It is simply an indication that such phenomenon could be happening, and it would warrant a more microeconomic investigation. Nonetheless, the absence of this phenomenon would indicate that the bordering states are, so far, not a threat to employment in Georgia's border counties. Thus, we focus on Georgia's border counties that have experienced a greater (smaller) rate of employment loss (gain) in 1998-1999 than in 1994-1997, comparing the change in employment growth rate with the change in their neighboring counties.

There are five sets of Georgia border counties that experienced a smaller rate of employment growth in 1998-1999 than in 1994-1997. (In all but one case, these counties experienced an employment decline in the 1998-1999 period.) Table 2 and Maps 4 and 5 highlight these counties and their neighboring counties.

The first set of Georgia counties, which are in northwest Georgia, consist of Catoosa, Walker, and Dade counties. These counties are contiguous to Hamilton and Marion counties on the Tennessee border, and DeKalb and Jackson counties on the Alabama border. Employment growth trends in DeKalb and Jackson counties did not change between the two sub-periods, while there was a slight improvement in the employment trends for Hamilton and Marion counties. Thus, there is no evidence of employment loss to Alabama, but there may be some employment loss to Tennessee. However, Catoosa, Walker and Dade counties are contiguous to Georgia counties that experienced significant employment growth in 1998-1999 (Whitfield, Gordon, and Chattooga counties). Thus, it is more likely that the relative job loss experienced by Catoosa, Walker, and Dade counties has been to neighboring Georgia counties rather than counties outside of Georgia.

The second set of counties consists of Madison, McDuffie, Columbia, and Richmond counties, which are contiguous to Aiken, McCormick and Edgefield counties on the mid-South Carolina border. Employment trends in these South Carolina counties did not improve in 1998-1999 relative to 1994-1997. Thus, there is no evidence of employment loss from Georgia to South Carolina on this section of the border. However, McDuffie, Columbia, and Richmond counties are contiguous

Employment Trends in Georgia Border Counties

TABLE 2. EMPLOYMENT LOSS IN GEORGIA BORDER COUNTIES

Name	Employment Trend 1994-1997 ^a	Employment Trend 1998-1999 ^a
Georgia counties on the Tennessee-Alabama border		
Catoosa, GA	0.45	-4.20
Dade, GA	0.00	-4.30
Hamilton, TN	-1.90	0.00
Marion, TN	-1.60	0.00
Dekalb, AL	0.78	0.00
Jackson, AL	0.00	0.00
Whitfield, GA	0.00	5.80
Gordon, GA	0.00	5.60
Chattooga, GA	-1.00	5.70
Georgia counties on the mid-South Carolina border		
Madison, GA	2.10	-2.90
McDuffie, GA	-1.30	-3.10
Columbia, GA	1.00	-3.10
Richmond, GA	-2.20	-3.10
Aiken, SC	-0.93	-0.93
McCormick, SC	0.95	-2.00
Edgefield, SC	-0.65	-0.65
Lincoln, GA	-1.50	5.60
Wilkes, GA	-0.39	5.00
Taliaferro, GA	0.00	4.60
Burke, GA	-2.00	4.90
Jeffereson, GA	-2.70	5.10
Georgia counties on the southernmost South Carolina border		
Effingham, GA	3.30	-2.20
Chatham, GA	-0.30	-2.20
Bryan, GA	3.40	-2.20
Beaufort, SC	2.81	2.81
Hampton, SC	0.65	-1.50
Jasper, SC	2.14	2.14
Bulloch, GA	3.90	5.40
Screven, GA	-3.70	5.20
Georgia counties on the mid-Alabama border		
Harris, GA	4.60	-1.90
Muscogee, GA	0.97	-1.90
Chattahoochee, GA	2.70	-1.90
Chambers, AL	0.00	-1.40
Lee, AL	1.70	-1.30
Russell, AL	2.20	1.00
Troup, GA	1.70	5.90
Meriwether, GA	-0.90	5.20
Talbot, GA	0.00	5.20
Marion, GA	-1.40	5.10
Stewart, GA	1.40	5.00

Employment Trends in Georgia Border Counties

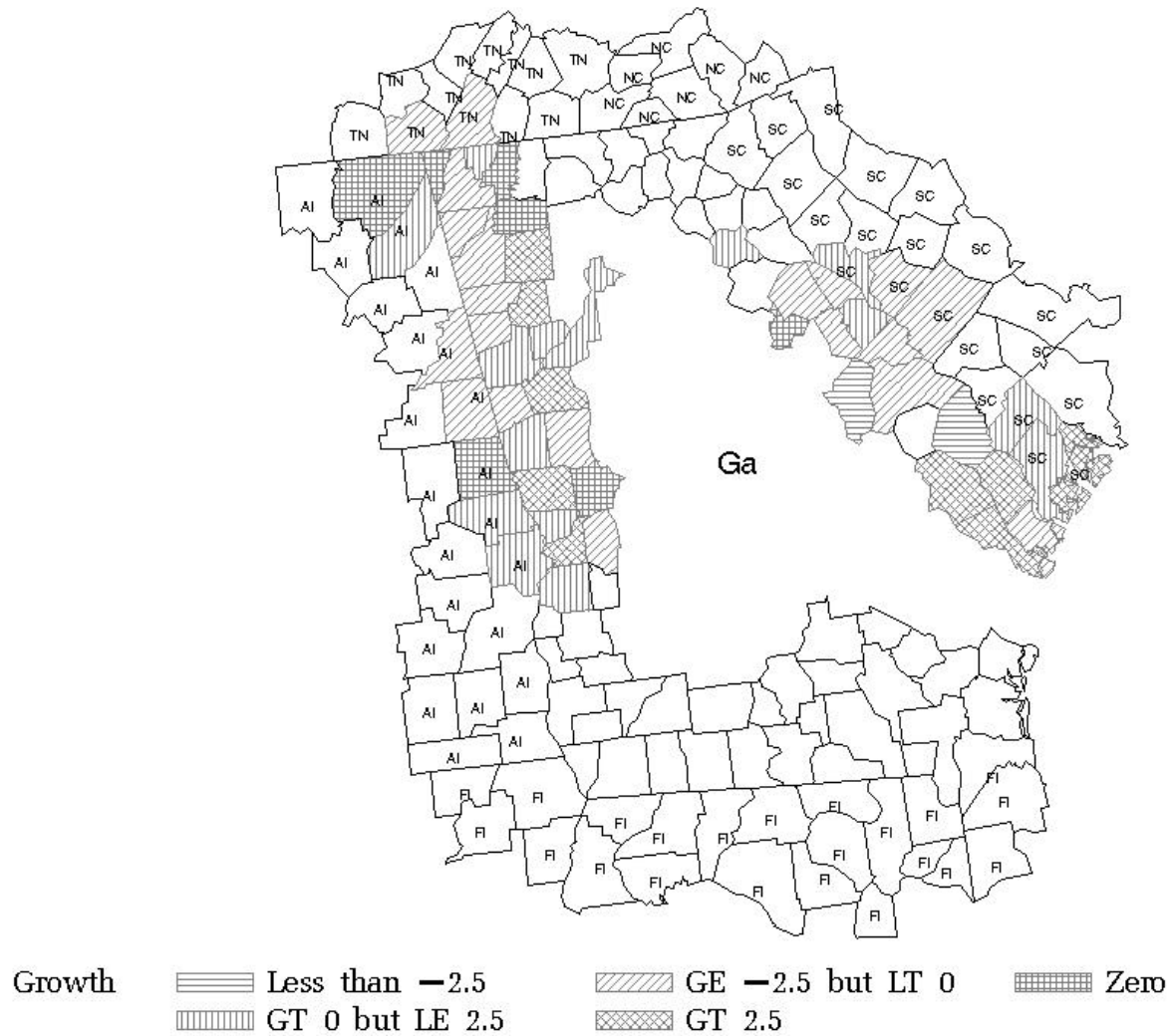
Name	Employment Trend 1994-1997 ^a	Employment Trend 1998-1999 ^a
Georgia counties on the northern Alabama border		
Coweta, GA	4.30	-0.91
Carroll, GA	1.40	-0.91
Fulton, GA	1.00	-0.91
Douglas, GA	1.90	-0.91
Paulding, GA	5.30	-0.91
Bartow, GA	2.80	-0.90
Cleburne, AL	-1.00	-4.20
Randolph, AL	-1.45	-1.45
Floyd, GA	-0.82	5.50
Polk, GA	-1.70	5.60
Haralson, GA	-1.60	5.80
Heard, GA	-1.90	5.50
Troup, GA	1.70	5.90
Meriwether, GA	-0.90	5.20

^aCoefficients should be multiplied by 1.E-3.

Source: Indicated States' Departments of Labor.

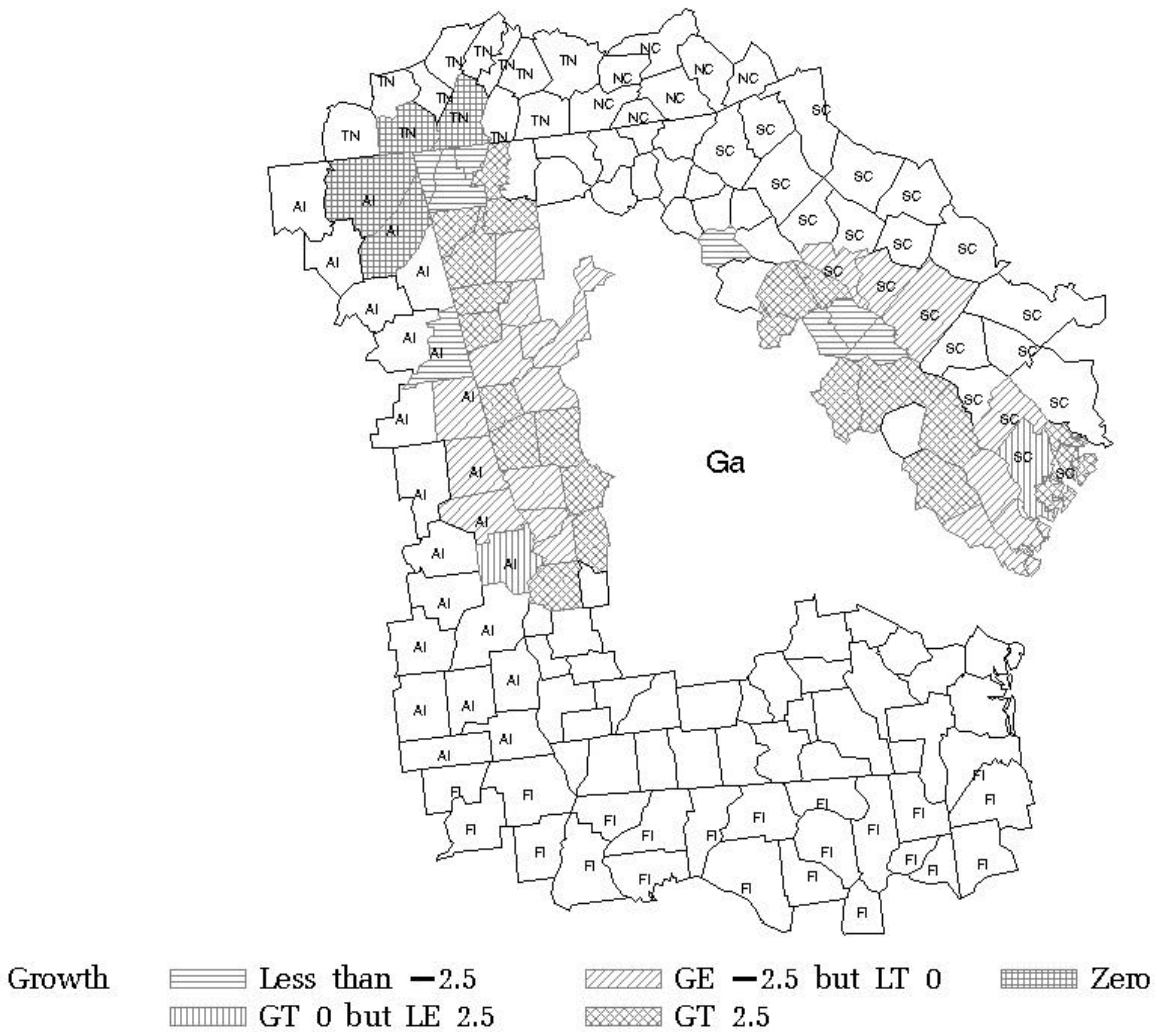
Employment Trends in Georgia Border Counties

**MAP 4. GEORGIA BORDER COUNTIES WITH LOWER GROWTH IN SECOND PERIOD
(1994-1997 GROWTH RATE)**



Employment Trends in Georgia Border Counties

**MAP 5. GEORGIA BORDER COUNTIES WITH LOWER GROWTH IN SECOND PERIOD
(1998-1999 GROWTH RATE)**



to Georgia counties that experienced significant employment growth (Lincoln, Wilkes, Taliaferro, Burke, and Jefferson counties). Thus, as with the first set of counties, it is more plausible that job movement occurred within Georgia than between Georgia and South Carolina.

The third set of Georgia border counties that experienced employment loss in 1998-1999 relative to 1994-1997 are Effingham, Chatham, and Bryan counties on the southernmost South Carolina border. These counties are contiguous to Beaufort, Hampton, and Jasper counties. These South Carolina counties experienced no increases in employment growth between the two sub-periods. On the other hand, two Georgia counties, Bulloch and Screven, lying to the north of Effingham and Bryan, did experience significant employment growth, an indication that the employment loss experienced by Georgia border counties is associated with employment gains in counties within Georgia rather than with counties in neighboring states.

Harris, Muscogee, and Chattahoochee counties comprise the fourth set of Georgia counties, and are neighbors to Chambers, Lee, and Russell counties along the mid-Alabama border. These Alabama counties have experienced employment loss in the recent past, and hence, there is no evidence that job movement is occurring from Georgia to Alabama. It is again more likely that job changes are occurring within Georgia; Harris, Muscogee and Chattahoochee counties are contiguous to Georgia counties (namely, Troup, Meriwether, Talbot, Marion, and Stewart) that have experienced significant growth.

The final group of Georgia counties that have experienced employment loss in 1998-1999 relative to 1994-1997 are Coweta, Carroll, Fulton, Douglas, Paulding, and Bartow. Of these counties, only Carroll is directly contiguous to Alabama border counties Cleburne and Randolph. Neither of these two counties has seen employment growth, but rather an overall employment loss. On the other hand, other neighboring counties on the Georgia side, which are also directly contiguous to counties on the Alabama side, have seen significant employment growth. These counties are Floyd, Polk, Haralson, Heard, Troup, and Meriwether. Therefore, there is no evidence that jobs are being lost to Alabama, but are quite possibly being lost to neighboring Georgia counties.

All Georgia counties lying along the Florida border have experienced significant employment growth in 1998-1999. Although Florida's border counties have also experienced an improvement in employment overall, the change does not compare to that of Georgia.

In summary, having looked closely at the Georgia border counties that have experienced employment loss in 1998-1999, there is no evidence to support the proposition that jobs are being lost to counties in neighboring states due to aggressive economic development policies on the part of neighboring states. The analysis suggests that it is more plausible that employment in Georgia border counties is being lost to neighboring Georgia counties. It is also important to point out that the Georgia border counties that have experienced employment loss are in, or contiguous to, metropolitan areas. It is possible of course that the decline in the employment growth would have been larger in the adjoining state and smaller in Georgia if Alabama and South Carolina had not adopted development incentives.

We also determined employment growth rates of aggregate employment for Georgia's border counties, and for each of the neighboring states' border counties (Table 3, and Maps 6 and 7). In the first sub-period, North Carolina's border counties had the highest growth rate, followed in order by Georgia, Alabama, and South Carolina. Florida's border counties had a zero growth rate, while Tennessee had an employment loss. In the second sub-period, Florida's border counties had the highest growth rate, followed in order by Georgia, South Carolina, North Carolina and Tennessee (the last three had zero growth rates), and Alabama (which experienced employment loss). Classifying states based on whose border counties experienced the largest increase in growth rates between the two sub-periods, we obtained the following ranking: Florida, Tennessee, Georgia, and South Carolina (both with no change), and finally North Carolina and Alabama (both with decreases in growth rates). These calculations provide no support for the proposition that Georgia border counties have lower employment growth rates because of competition from neighboring states.

Employment Trends in Georgia Border Counties

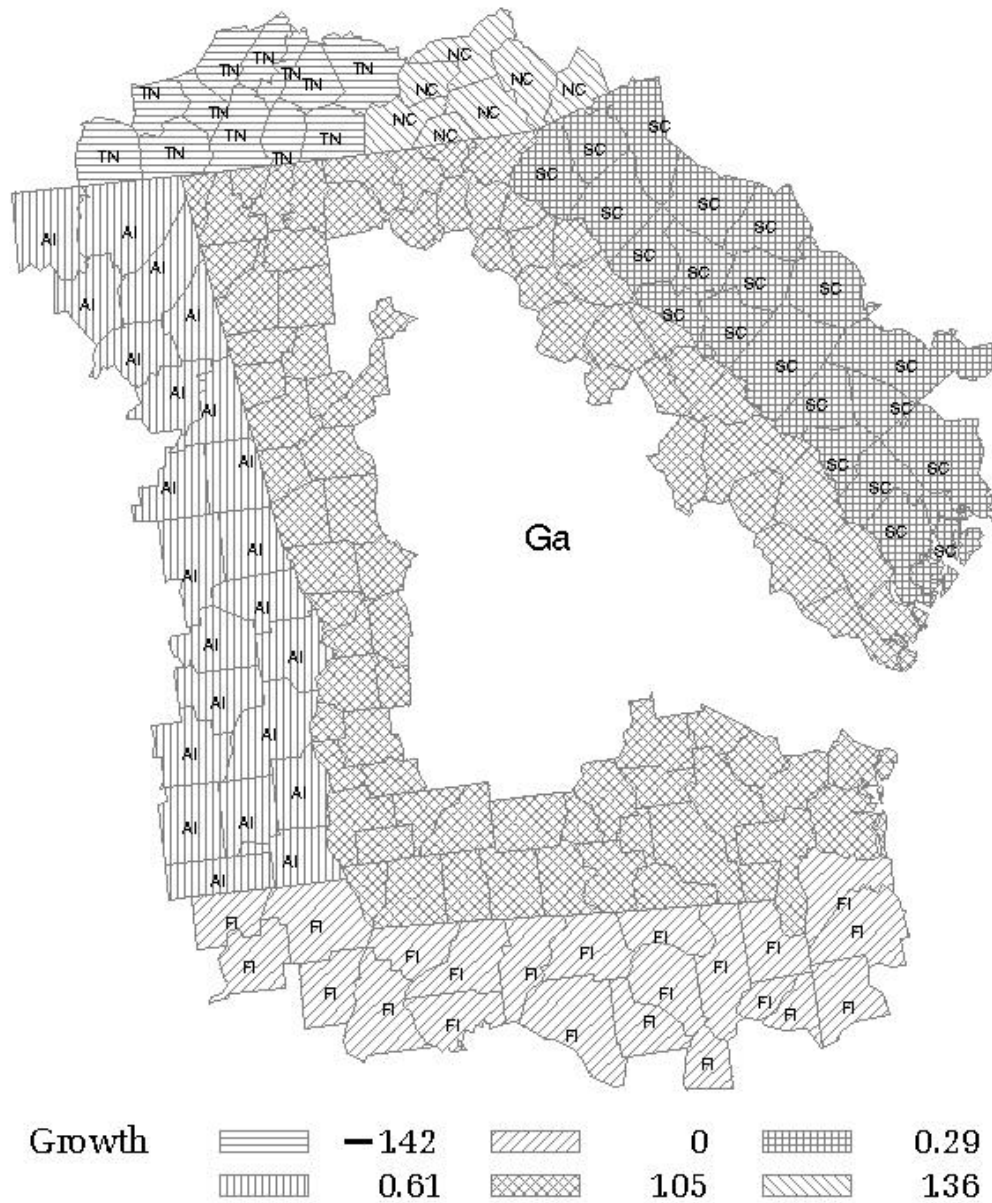
**TABLE 3. AGGREGATE EMPLOYMENT GROWTH
RATES FOR GEORGIA BORDER COUNTIES**

State	Employment Trend 1994-1997^a	Employment Trend 1998-1999^a
Alabama	0.61	-1.17
Florida	0.00	1.82
Georgia	0.84	1.25
North Carolina	1.36	0.00
South Carolina	0.00	0.00
Tennessee	-1.42	0.00

^aCoefficients should be multiplied by 1.E-3.

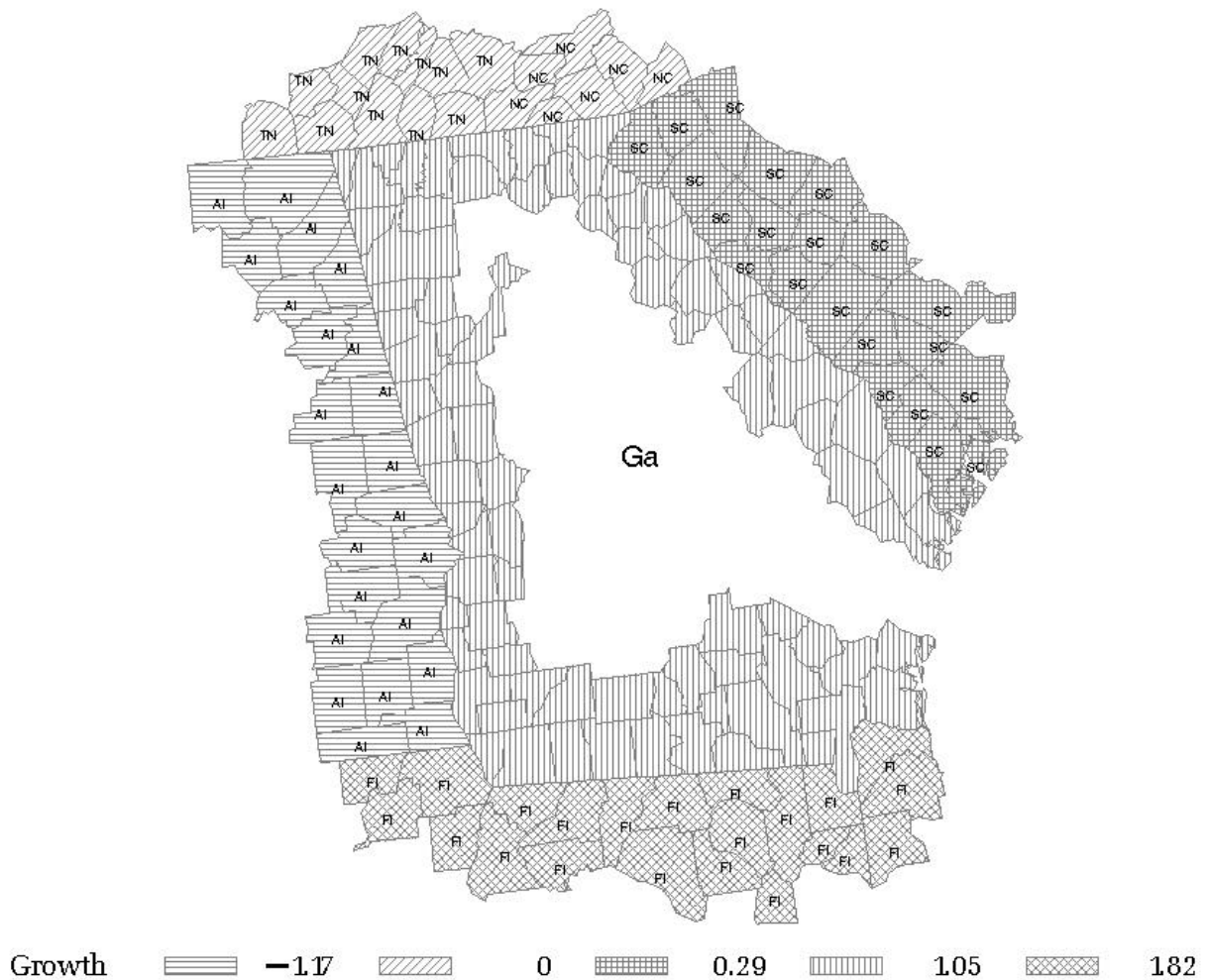
Source: Indicated States' Departments of Labor.

MAP 6. AGGREGATE EMPLOYMENT GROWTH IN BORDER COUNTIES (1994-1997)



Employment Trends in Georgia Border Counties

MAP 7. AGGREGATE EMPLOYMENT GROWTH IN BORDER COUNTIES (1998-1999)



Employment Changes in Manufacturing

While we have found no evidence that Georgia's border counties have lost employment to the border counties of neighboring states, the concern may be that manufacturing jobs are going to non-Georgia border counties. Thus, we compare the change in manufacturing employment growth rates for 1998-1999 to that for 1969-1997. Note this is a longer period than we used for total employment. For this, we computed the average annual percentage change in manufacturing employment for the period 1969-1997 and for 1998-1999. We also computed the standardized growth rate for 1998-1999, where the average growth rate for 1969-1997 is subtracted from the growth rate for 1998-1999, and the result is divided by the standard deviation of the growth rates over the period 1969-1997. For each county, a positive sign on the standardized growth indicates a higher than average growth rate, a negative sign indicates a lower than average growth rate, and an absolute value higher than one indicates that the rate is relatively significantly different than the average (the difference exceeds the standard deviation). Results are presented in Table 4. Map 8 shows the growth rate for 1998-1999, Map 9 shows the standardized growth rate for the same period, and Map 10 shows only those standardized growth rates that are higher than one in absolute value (relatively significant changes). Again, there is no evidence that there are losses of manufacturing jobs from Georgia to neighboring states.

Map 9 shows no evidence that manufacturing jobs are moving to Georgia's neighboring states. In general, Georgia counties that have suffered a lower than average growth rate in 1998-1999 tend to be contiguous to other Georgia counties that have enjoyed a higher than average growth rate. Focusing on counties that have experienced a significant reduction in manufacturing employment growth rates relative to their historical average (Map 10), we see the same pattern. Along the Alabama border, Carroll, Heard, and Stewart counties experienced negative growth rates in 1998-1999. Stewart county is the only Georgia county adjacent to an Alabama county (Barbour) that has experienced a significant growth in employment. Thus, there is a possibility that some manufacturing jobs in Georgia were lost to Alabama in this instance. Along the Tennessee and North Carolina borders, Fannin and White counties experienced a negative manufacturing employment growth in

Employment Trends in Georgia Border Counties

TABLE 4. MANUFACTURING EMPLOYMENT TRENDS IN GEORGIA BORDER COUNTIES

Name	Employment Trend 1969-1997	Employment Trend 1998-1999	Change in Employment Trends 1998-1999
Barbour, Al	2.81	17.92	2.06
Bullock, Al	NA	NA	NA
Calhoun, Al	-0.23	-0.95	-0.18
Chambers, Al	-1.32	-1.83	-0.11
Cherokee, Al	2.10	-8.59	-0.79
Clay, Al	3.06	-6.46	-1.32
Cleburne, Al	0.76	-2.70	-0.52
Coffee, Al	2.27	-6.36	-0.96
Dale, Al	-0.72	5.40	0.77
DeKalb, Al	5.49	1.80	-0.65
Etowah, Al	-0.90	-9.80	-1.72
Geneva, Al	1.71	-31.85	-3.15
Henry, Al	1.72	1.44	-0.04
Houston, Al	1.94	-6.12	-1.37
Jackson, Al	2.03	5.81	0.61
Lee, Al	1.04	-2.53	-0.62
Macon, Al	-2.96	-11.59	-0.49
Madison, Al	4.06	-6.73	-1.83
Marshall, Al	3.84	-4.16	-1.67
Pike, Al	1.51	4.30	0.49
Randolph, Al	0.97	-5.28	-0.42
Russell, Al	2.65	-0.26	-0.48
Tallapoosa, Al	-0.05	-10.11	-2.02
Bradford, Fl	2.66	11.35	0.61
Calhoun, Fl	0.48	-4.72	-0.34
Clay, Fl	3.53	-1.40	-0.42
Columbia, Fl	0.82	-3.15	-0.31
Duval, Fl	0.93	-1.52	-0.66
Gadsden, Fl	0.78	2.50	0.16
Gilchrist, Fl	11.85	-17.34	-1.01
Holmes, Fl	2.19	-5.59	-0.59
Jackson, Fl	0.46	-34.72	-4.03
Jefferson, Fl	-0.11	5.36	0.61
Lafayette, Fl	NA	NA	NA
Leon, Fl	2.71	-3.07	-0.78
Madison, Fl	2.07	-3.38	-0.60
Nassau, Fl	0.22	-5.79	-1.16
Taylor, Fl	0.03	6.23	1.03
Atkinson, GA	6.30	11.52	0.28
Bacon, GA	4.06	0.53	-0.27
Banks, GA	0.78	2.38	0.24
Bartow, GA	1.62	15.30	2.22
Berrien, GA	1.97	-10.43	-1.15
Brantley, GA	2.38	-3.59	-0.39

Employment Trends in Georgia Border Counties

Name	Employment Trend 1969-1997	Employment Trend 1998-1999	Change in Employment Trends 1998-1999
Brooks, GA	2.85	-9.72	-1.10
Bryan, GA	3.87	-16.05	-0.80
Camden, GA	0.11	-7.27	-1.27
Carroll, GA	1.11	-5.50	-1.34
Catoosa, GA	3.03	15.49	1.12
Charlton, GA	2.74	22.11	1.19
Chatham, GA	-0.23	0.06	0.07
Chattooga, GA	-0.19	5.10	0.95
Clinch, GA	0.69	-25.72	-2.37
Coffee, GA	2.63	11.05	1.06
Colquitt, GA	0.31	13.49	1.70
Columbia, GA	6.68	-20.26	-2.04
Cook, GA	0.15	3.06	0.39
Coweta, GA	0.32	-1.28	-0.30
Dade, GA	4.71	-6.99	-0.76
Decatur, GA	1.96	-5.30	-0.76
Douglas, GA	5.55	13.48	0.67
Early, GA	0.63	-0.92	-0.24
Echols, GA	NA	NA	NA
Effingham, GA	7.42	5.06	-0.15
Elbert, GA	0.76	1.81	0.12
Fannin, GA	0.41	-18.74	-1.90
Floyd, GA	-0.21	-4.28	-0.87
Franklin, GA	0.78	-2.00	-0.40
Fulton, GA	-0.49	-1.13	-0.13
Gilmer, GA	3.59	2.67	-0.13
Glynn, GA	-1.04	1.86	0.72
Gordon, GA	3.14	5.97	0.40
Grady, GA	1.09	-18.67	-2.84
Habersham, GA	0.91	0.34	-0.11
Haralson, GA	-2.68	1.66	0.65
Hart, GA	0.52	9.82	1.34
Heard, GA	2.61	-12.60	-1.40
Jefferson, GA	0.89	-10.70	-1.45
Jenkins, GA	2.75	1.05	-0.07
Lanier, GA	2.77	17.20	0.62
Lincoln, GA	2.67	-15.75	-1.55
Lowndes, GA	0.97	-1.79	-0.48
Lumpkin, GA	0.94	27.84	3.44
McDuffie, GA	-0.63	-0.76	-0.01
Madison, GA	-1.76	4.62	0.39
Meriwether, GA	-0.51	-2.02	-0.19
Miller, GA	-1.28	0.00	0.06
Murray, GA	6.68	6.89	0.02
Muscogee, GA	-0.10	-2.77	-0.72

Employment Trends in Georgia Border Counties

Name	Employment Trend 1969-1997	Employment Trend 1998-1999	Change in Employment Trends 1998-1999
Oglethorpe, GA	0.22	20.63	1.73
Paulding, GA	2.05	0.53	-0.20
Rabun, GA	1.99	5.42	0.32
Randolph, GA	0.76	-0.58	-0.18
Richmond, GA	-0.27	6.41	1.51
Screven, GA	4.57	-8.03	-0.87
Seminole, GA	-0.19	6.53	0.84
Stephens, GA	-0.06	-15.40	-2.56
Stewart, GA	1.45	-33.33	-2.60
Thomas, GA	1.72	-14.84	-2.48
Towns, GA	NA	NA	NA
Troup, GA	1.15	3.22	0.36
Union, GA	-0.78	-8.05	-0.67
Walker, GA	-0.20	-0.31	0.06
Ware, GA	-0.13	-6.08	-0.89
Webster, GA	NA	NA	NA
White, GA	1.56	-15.88	-1.37
Whitfield, GA	2.18	0.14	-0.35
Wilkes, GA	1.48	-3.34	-0.52
Cherokee, NC	-0.20	-4.80	-0.50
Clay, NC	0.52	3.33	0.11
Graham, NC	NA	NA	NA
Jackson, NC	-0.46	-15.51	-1.39
Macon, NC	1.02	-6.59	-0.74
Swain, NC	-2.38	-5.13	-0.21
Transylvania, NC	-0.57	-8.09	-1.26
Abbeville, SC	0.12	-14.90	-2.40
Aiken, SC	0.85	-51.74	-10.60
Allendale, SC	1.67	-19.79	-2.63
Anderson, SC	-0.31	-1.52	-0.27
Bamberg, SC	-0.46	-.09	0.04
Barnwell, SC	0.64	5.04	0.56
Beaufort, SC	2.26	-12.19	-1.38
Colleton, SC	-0.15	-10.00	-1.60
Edgefield, SC	0.80	1.96	0.12
Greenville, SC	0.32	1.18	0.21
Greenwood, SC	-0.65	-6.55	-1.08
Hampton, SC	-0.54	-4.38	-0.56
Jasper, SC	-0.74	56.02	3.01
Laurens, SC	-1.00	-10.54	-1.84
Lexington, SC	1.79	2.84	0.19
McCormick, SC	-1.95	-5.85	-0.46
Newberry, SC	1.07	-2.04	-0.68
Oconee, SC	0.43	-2.34	-0.51
Orangeburg, SC	1.22	-5.17	-1.22

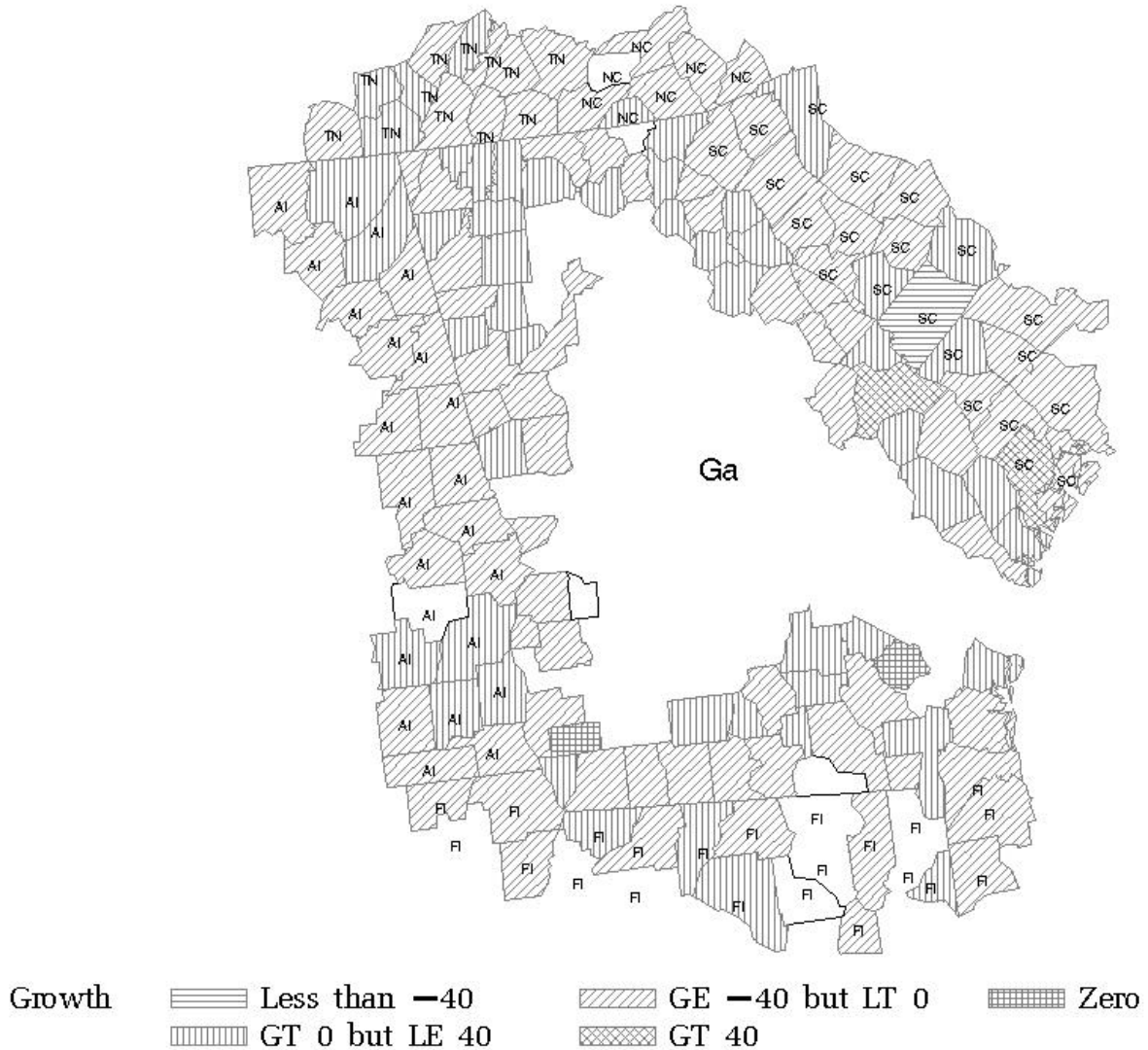
Employment Trends in Georgia Border Counties

Name	Employment Trend 1969-1997	Employment Trend 1998-1999	Change in Employment Trends 1998-1999
Pickens, SC	-0.43	-5.14	-0.88
Saluda, SC	1.23	-0.29	-0.19
Bledsoe, TN	5.15	-0.13	-0.19
Franklin, TN	0.53	-5.32	-0.55
Grundy, TN	-0.33	2.06	0.19
Hamilton, TN	-1.30	-0.01	0.34
McMinn, TN	0.37	-2.77	-0.53
Marion, TN	1.82	0.34	-0.21
Meigs, TN	6.33	-11.41	-0.85
Monroe, TN	3.30	-2.01	-0.62
Polk, TN	-2.30	-27.89	-2.18
Rhea, TN	1.96	6.24	0.64
Sequatchie, TN	4.95	5.45	0.02

^aThese are the differences on the employment trends divided by the standard deviation of the annual growth rates for 1967-1999.

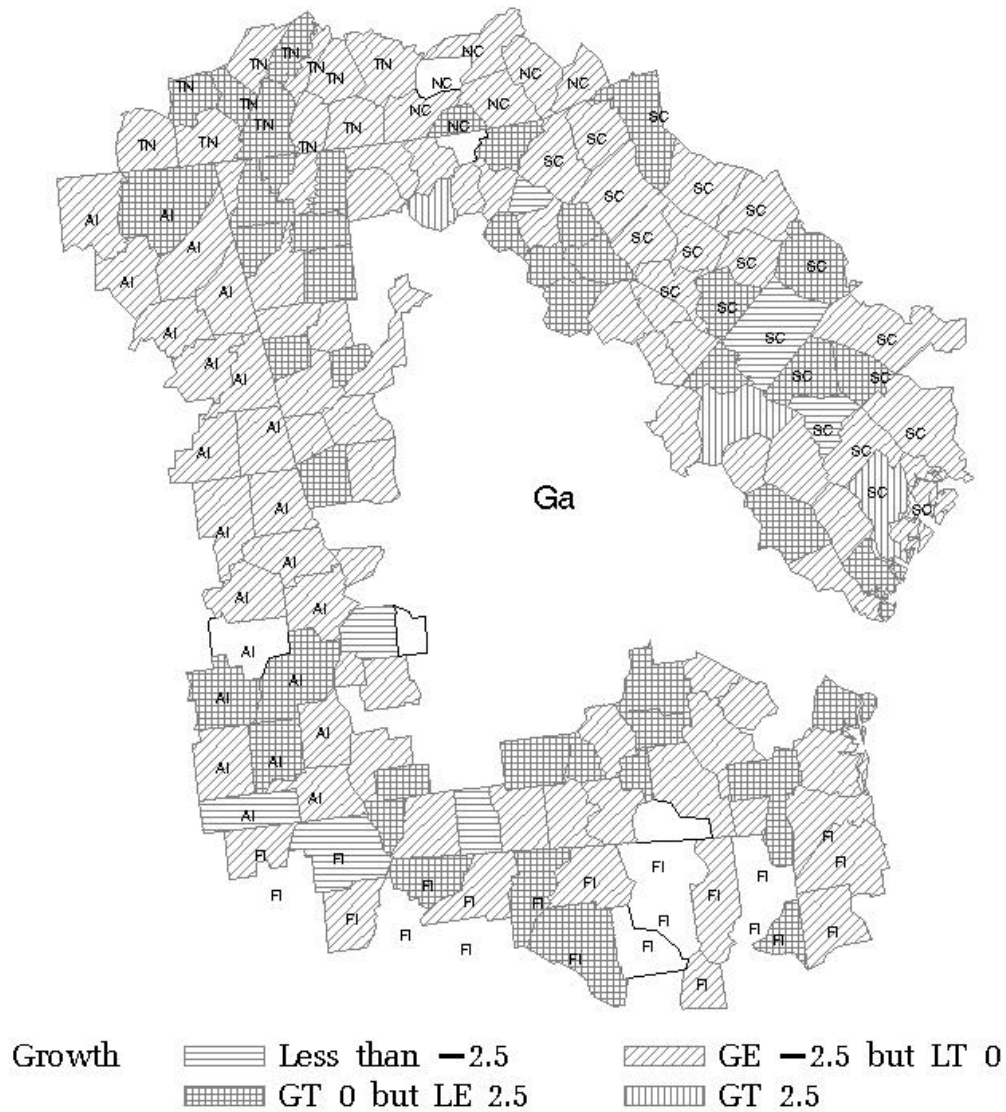
Source: Indicated States' Departments of Labor for 1998 and 1999; Regional Economic Information System (REIS) for 1969-1977.

**MAP 8. MANUFACTURING EMPLOYMENT GROWTH IN BORDER COUNTIES
(1998-1999)**

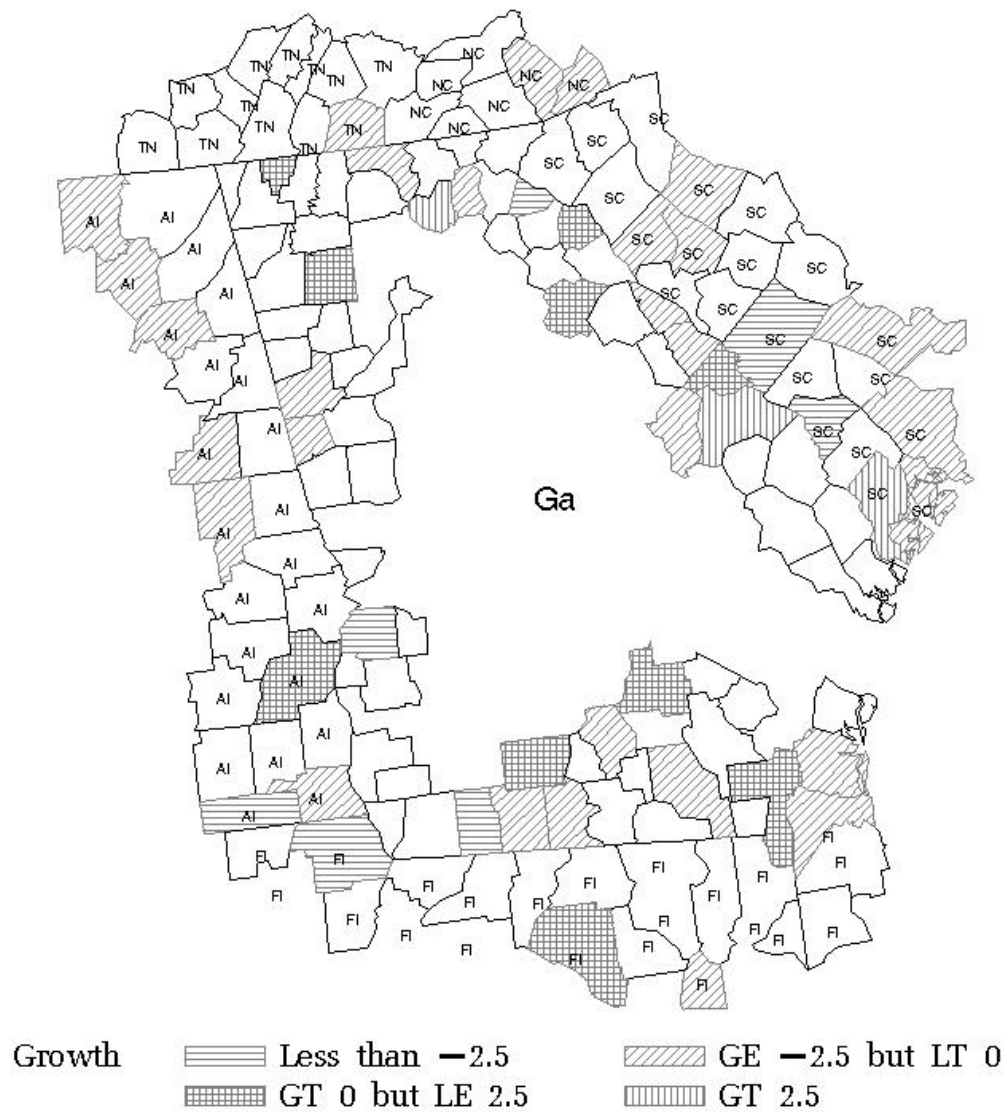


Employment Trends in Georgia Border Counties

**MAP 9. STANDARDIZED GROWTH RATE FOR MANUFACTURING EMPLOYMENT
(1998-1999)**



MAP 10. BORDER COUNTIES WITH SIGNIFICANT STANDARDIZED GROWTH RATE (1998-1999)



1998-1999, but there are no Tennessee-North Carolina counties that have experienced significant employment growth. On the other hand, Fannin and White are contiguous to Lumpkin county in Georgia, a county which has experienced a significant increase in manufacturing employment growth (27.8 percent). Therefore, there is no evidence that manufacturing jobs were lost to Tennessee or North Carolina, but rather to neighboring Georgia counties.

Along the South Carolina border, Lincoln, Columbia, and Jefferson counties experienced manufacturing employment loss in 1998-1999. They are contiguous to Aiken county in South Carolina and Richmond and Burke counties in Georgia. While Aiken county has experienced severe manufacturing employment loss (-51.7 percent), Richmond and Burke have experienced significant growth (6.4 percent and 47.7 percent respectively). Therefore, it is likely that employment change occurred within Georgia, rather than in South Carolina counties.

Along the Florida border, Camden (-7.3 percent), Clinch (-25.7 percent), Berrien (-10.4 percent), Brooks (-9.7 percent), Thomas (-14.8 percent) and Grady (-18.7 percent) counties experienced manufacturing employment loss. Camden and Clinch are contiguous to Charlton in Georgia, which has experienced employment growth (22.1 percent). Berrien, Brooks, Thomas, and Grady are contiguous to Coffee (11.0 percent) and Colquitt (13.5 percent) in Georgia and to Taylor (6.2 percent) in Florida. Although it is possible that some manufacturing employment loss took place to Taylor County in Florida, it appears that most of the employment loss occurred to neighboring Georgia counties.

In summary, the same pattern that was observed for Georgia border county overall employment changes appears to be true for manufacturing employment changes in 1998-1999: manufacturing jobs are more likely to have been lost to other Georgia counties rather than to neighboring states' counties. Thus, there is no evidence that aggressive development policies in Georgia neighboring states have had an effect on Georgia manufacturing jobs.

Employment Changes at the Industry Level

In Section II we calculated employment growth rates for all Georgia border counties and Georgia counties adjacent to the border counties. Appendix B shows how employment changed by industry. The industries are: agriculture, mining, construction, manufacturing, services, finance, insurance and real estate (FIRE), transportation, communication and utilities (TCU), retail trade, wholesale trade, and government. Rather than considering all the border counties, we focus in this section on the nineteen Georgia border counties that experienced negative employment growth in 1998-1999. Table 5 presents the average annual percentage change in industry employment for 1994-1997 and the percentage change in industry employment in 1998-1999 for these 19 Georgia border counties.

Catoosa, Walker, and Dade counties on the Tennessee and Alabama borders experienced the same pattern of large employment losses in 1998-1999 in construction and mining, FIRE, services, and TCU, and moderate losses in retail trade.

McDuffie, Columbia, and Richmond counties on the mid-South Carolina border experienced the same pattern of significant employment losses in FIRE, and moderate to small losses in most of the other sectors, except in manufacturing for McDuffie and Richmond.

Effingham, Chatham, and Bryan on the South Carolina border experienced significant employment losses in most sectors except in manufacturing and retail trade.

Harris, Muscogee, Chattahoochee counties on the mid-Alabama border are not comparable in terms of percentage losses in employment, first because the data is mostly missing for Chattahoochee county, and second because employment losses in Harris are much larger than those in Muscogee. Nonetheless, there is a similar pattern of large losses in FIRE, construction, mining, and services.

Employment Trends in Georgia Border Counties

**TABLE 5. EMPLOYMENT CHANGES BY INDUSTRY,
GEORGIA BORDER EMPLOYMENT LOSS COUNTIES**

County	Sector	Employment Trend	Employment Trend
		1994-1997	1998-1999
Bartow	Ag. serv., forestry, fishing, and other	-1.3	-12.2
Bartow	Construction&mining	4.6	-15.9
Bartow	Finance, insurance, and real estate	6.4	-26.4
Bartow	Manufacturing	-1.2	7.0
Bartow	Retail trade	10.7	-2.6
Bartow	Services	11.2	-14.9
Bartow	Transportation and public utilities	8.2	5.2
Bartow	Wholesale trade	-5.7	1.9
Bartow	Government and government enterprises	3.0	-1.9
Bryan	Ag. serv., forestry, fishing, and other	13.1	-25.8
Bryan	Construction&mining	6.1	-6.9
Bryan	Finance, insurance, and real estate	3.9	-37.4
Bryan	Manufacturing	-4.0	-11.3
Bryan	Retail trade	5.9	-6.3
Bryan	Services	7.5	-25.6
Bryan	Transportation and public utilities	7.1	-23.4
Bryan	Wholesale trade	17.1	-20.1
Bryan	Government and government enterprises	2.8	0.6
Carroll	Ag. serv., forestry, fishing, and other	NA	NA
Carroll	Construction&mining	8.5	-23.0
Carroll	Finance, insurance, and real estate	1.6	-15.3
Carroll	Manufacturing	-2.4	-4.5
Carroll	Retail trade	5.8	-7.4
Carroll	Services	4.1	-15.1
Carroll	Transportation and public utilities	-2.9	-0.3
Carroll	Wholesale trade	1.2	2.2
Carroll	Government and government enterprises	3.3	-2.4
Catoosa	Ag. serv., forestry, fishing, and other	NA	NA
Catoosa	Construction&mining	2.3	-30.9
Catoosa	Finance, insurance, and real estate	5.5	-16.2
Catoosa	Manufacturing	-0.4	7.6
Catoosa	Retail trade	5.1	-11.3
Catoosa	Services	14.8	-18.5
Catoosa	Transportation and public utilities	4.5	-12.1
Catoosa	Wholesale trade	-3.0	1.1
Catoosa	Government and government enterprises	-12.6	-2.9
Chatham	Ag. serv., forestry, fishing, and other	3.6	-10.2
Chatham	Finance, insurance, and real estate	2.0	-21.1
Chatham	Manufacturing	1.1	-1.9
Chatham	Retail trade	2.5	-3.1
Chatham	Services	3.8	-9.7
Chatham	Transportation and public utilities	-0.4	-11.0
Chatham	Wholesale trade	-1.5	-3.7
Chatham	Government and government enterprises	0.1	-13.1
Chattahoochee	Ag. serv., forestry, fishing, and other	NA	NA
Chattahoochee	Construction&mining	30.4	-41.1
Chattahoochee	Finance, insurance, and real estate	1.4	NA
Chattahoochee	Manufacturing	NA	NA

Employment Trends in Georgia Border Counties

County	Sector	Employment Trend 1994-1997	Employment Trend 1998-1999
Chattahoochee	Retail trade	NA	NA
Chattahoochee	Services	13.2	-15.3
Chattahoochee	Wholesale trade	NA	NA
Chattahoochee	Government and government enterprises	-8.2	-48.7
Columbia	Ag. serv., forestry, fishing, and other	NA	NA
Columbia	Construction&mining	2.8	-8.1
Columbia	Finance, insurance, and real estate	2.6	-28.2
Columbia	Manufacturing	3.4	-12.1
Columbia	Retail trade	8.4	-7.1
Columbia	Services	6.1	-11.4
Columbia	Transportation and public utilities	7.6	-4.1
Columbia	Wholesale trade	3.1	-11.0
Columbia	Government and government enterprises	0.1	-3.8
Coweta	Ag. serv., forestry, fishing, and other	NA	NA
Coweta	Construction&mining	7.8	-2.1
Coweta	Finance, insurance, and real estate	5.0	-19.7
Coweta	Manufacturing	1.2	1.1
Coweta	Retail trade	14.3	-8.9
Coweta	Services	5.8	-15.2
Coweta	Transportation and public utilities	-1.7	-8.8
Coweta	Wholesale trade	9.7	-5.9
Coweta	Government and government enterprises	5.1	5.0
Dade	Ag. serv., forestry, fishing, and other	-0.5	NA
Dade	Construction&mining	8.9	-30.7
Dade	Finance, insurance, and real estate	-1.6	-12.2
Dade	Manufacturing	7.9	-1.6
Dade	Services	-1.3	-26.2
Dade	Transportation and public utilities	13.2	-35.8
Dade	Wholesale trade	-25.9	-3.6
Dade	Government and government enterprises	2.4	-2.7
Douglas	Ag. serv., forestry, fishing, and other	NA	NA
Douglas	Construction&mining	10.2	-18.7
Douglas	Finance, insurance, and real estate	3.2	-24.1
Douglas	Manufacturing	14.9	9.8
Douglas	Retail trade	6.4	-2.0
Douglas	Services	3.3	-9.9
Douglas	Transportation and public utilities	0.8	-9.9
Douglas	Wholesale trade	7.7	-8.4
Douglas	Government and government enterprises	3.6	0.0
Effingham	Ag. serv., forestry, fishing, and other	0.7	-10.3
Effingham	Construction&mining	0.9	-20.3
Effingham	Finance, insurance, and real estate	6.4	-20.6
Effingham	Manufacturing	0.6	5.8
Effingham	Retail trade	13.6	-3.8
Effingham	Services	7.8	-32.6
Effingham	Transportation and public utilities	4.4	-21.7
Effingham	Wholesale trade	3.3	-14.5
Effingham	Government and government enterprises	3.5	0.0
Fulton	Ag. serv., forestry, fishing, and other	4.2	-9.2
Fulton	Construction&mining	3.5	-3.9
Fulton	Finance, insurance, and real estate	3.1	-9.9
Fulton	Manufacturing	1.3	-0.6

Employment Trends in Georgia Border Counties

County	Sector	Employment Trend 1994-1997	Employment Trend 1998-1999
Fulton	Retail trade	2.8	-2.8
Fulton	Services	5.6	-6.2
Fulton	Wholesale trade	1.1	-3.7
Fulton	Government and government enterprises	-0.2	-2.2
Harris	Construction&mining	1.0	-34.2
Harris	Finance, insurance, and real estate	-1.0	-43.5
Harris	Manufacturing	13.8	NA
Harris	Retail trade	5.4	-10.4
Harris	Services	3.1	-22.5
Harris	Transportation and public utilities	5.8	-26.1
Harris	Government and government enterprises	6.2	1.8
McDuffie	Ag. serv., forestry, fishing, and other	NA	NA
McDuffie	Construction&mining	-2.7	-4.2
McDuffie	Finance, insurance, and real estate	1.3	-25.4
McDuffie	Manufacturing	-3.6	1.8
McDuffie	Retail trade	3.7	-8.8
McDuffie	Services	2.4	-18.3
McDuffie	Transportation and public utilities	-6.5	-16.7
McDuffie	Wholesale trade	-13.3	-2.7
McDuffie	Government and government enterprises	2.0	-0.9
Madison	Ag. serv., forestry, fishing, and other	NA	NA
Madison	Construction&mining	6.1	-21.5
Madison	Finance, insurance, and real estate	9.6	-31.7
Madison	Manufacturing	-13.5	53.1
Madison	Retail trade	9.2	-17.9
Madison	Services	3.4	-25.2
Madison	Transportation and public utilities	3.5	-21.7
Madison	Wholesale trade	-0.6	-9.7
Madison	Government and government enterprises	1.4	-0.7
Muscogee	Ag. serv., forestry, fishing, and other	3.8	-8.1
Muscogee	Construction&mining	4.3	-7.5
Muscogee	Finance, insurance, and real estate	3.8	-12.3
Muscogee	Manufacturing	0.7	-2.9
Muscogee	Retail trade	3.9	-5.4
Muscogee	Services	5.6	-7.4
Muscogee	Transportation and public utilities	4.3	-3.6
Muscogee	Wholesale trade	3.7	-17.7
Muscogee	Government and government enterprises	6.5	-10.3
Paulding	Ag. serv., forestry, fishing, and other	NA	NA
Paulding	Construction&mining	13.1	-14.5
Paulding	Finance, insurance, and real estate	6.6	-28.6
Paulding	Manufacturing	7.0	8.0
Paulding	Retail trade	11.1	0.2
Paulding	Services	6.1	-11.7
Paulding	Transportation and public utilities	13.2	-9.8
Paulding	Wholesale trade	-6.3	-4.8
Paulding	Government and government enterprises	7.0	-2.7
Richmond	Construction&mining	8.1	-4.0
Richmond	Finance, insurance, and real estate	-1.5	-21.9
Richmond	Manufacturing	-1.0	0.9
Richmond	Retail trade	0.7	-4.6
Richmond	Services	2.3	-9.3
Richmond	Transportation and public utilities	6.0	-2.9

Employment Trends in Georgia Border Counties

County	Sector	Employment Trend	Employment Trend
		1994-1997	1998-1999
Richmond	Wholesale trade	0.4	-9.5
Richmond	Government and government enterprises	0.7	-14.6
Walker	Ag. serv., forestry, fishing, and other	NA	NA
Walker	Construction&mining	7.4	-24.2
Walker	Manufacturing	-2.1	-3.2
Walker	Retail trade	1.8	-13.0
Walker	Services	6.1	-23.8
Walker	Transportation and public utilities	3.3	-35.8
Walker	Wholesale trade	2.3	4.4
Walker	Government and government enterprises	2.3	-3.4

Employment Trends in Georgia Border Counties

For Coweta, Carroll, Douglas, Fulton, Paulding, and Bartow counties on the upper-Alabama border, FIRE had the highest employment losses, followed by the services sector and retail trade.

It is striking that none of the job losses can be attributed to the manufacturing sector. Rather, they seem to have occurred mainly in FIRE and services. These activities tend to be local rather than export-oriented activities, which is an indication that the employment losses are due to local economic slumps.

Labor Market Linkages

Aggressive development policies in Georgia neighboring states do not necessarily lead to employment losses in Georgia. In fact, there is evidence in the economics literature that neighboring regions can benefit from each other's employment growth and suffer from each others' employment losses due to labor market linkages. In this section, we model the effect of an employment shock in a given county on its own future employment, and on employment in the neighboring counties. Suppose that this employment shock consists of the creation of 1000 new jobs in a South Carolina county located along the Georgia border due to the location of a new firm. Suppose further that the 1000 new jobs cause further employment increases through the multiplier effect. It is expected that because neighboring counties may share the same regional market or may cater to the same export market, employment changes in the South Carolina county will propagate over distance to neighboring counties, and over the following years.

Thus, we study the relationships in employment changes between the relevant counties. The economic literature has shown that regional employment shocks have a long-term effect, i.e., once an employment shock occurs it takes several years for employment levels to reach a new equilibrium (Blanchard and Katz, 1992). Furthermore, an employment shock at one time is usually followed by further movements in the same direction (Glendon and Vigdor, 2001). Besides the persistent time effects, the literature has also shown that economic market linkages between geographic neighbors cause employment shocks in one area to propagate to its neighbors (Glendon and Vigdor, 2001). The implications of these findings in this context are important because they add a new consideration to interstate competition for new business location. The first implication is that employment loss in a given year could be a consequence of an employment shock in previous years, and thus not necessarily attributable to contemporaneous changes. The second implication is that employment growth due to an exogenous shock (such as new firm location) in one state will have positive effects on employment in the adjoining state. Stated differently, whichever state the firm chooses to locate in, the neighboring state will also benefit in terms of employment growth due to the market linkages. Employment loss in one region should also be of concern to a neighboring region, as it also is likely to experience some employment loss for the same reasons.

In order to quantify the time and geographic effects of employment shocks, we utilize the REIS dataset, which contains a twenty-eight-year (1969-1997) panel of employment data at the county level. We analyze the effect of total employment shocks as well as the effect of manufacturing employment shocks. The analysis is performed first for all counties in Georgia and its neighboring states. However, since small counties' employment shocks may not be as significant as those of more substantial counties, we perform the analysis for "employment center" counties in Georgia and its neighboring states. We define these counties as those whose average employment over 1969-1997 is higher than that of any other county within a 50-mile radius, and that have at least one county whose population centroid lies within twenty miles of its own population centroid. Finally, we perform the analysis for Georgia and its neighboring states' border counties to quantify the effect particularly for these counties of interest.

The dependent variables in the regressions are the natural logarithm of employment. Employment is normalized relative to national employment to remove macroeconomic shocks as sources of variation. The dependent variable, denoted E_d , is employment within distance d , where $d = c, 25, 50, 75, 100, 125, 150, 200, 225, \text{ or } 250$, and indicates whether the employment is the own-county employment, denoted c , or aggregated employment of counties whose centroid lies within 25, 50, etc. mile-rings from the county's centroid. The results are presented in Table 6; the coefficients are significant at the 5 percent level except where indicated (NS).

Each column in Table 6 shows regression coefficients from a single regression. Each row shows the parameter estimates for different geographic areas, i.e., for the own-county or for successive 25-mile wide rings around it. Reading row-wise, the parameter γ shows the contemporaneous correlation in employment changes between the counties and the indicated concentric rings. The parameter is positive and highly significant, which is evidence of positive spatial correlation across a geographic area as wide as 250 miles from the origin of employment shock. The parameter also decreases with distance, which indicates that, although an employment shock propagates through space, its effect gets smaller with distance. For example, an area within 25 miles of county X, which we assume to be an employment center

TABLE 6.

Table 6 Contd.

would experience a 0.394 percent employment increase for the 1 percent increase in employment in the employment center. This percentage decreases to 0.28 percent for an area that is between 25 and 50 miles of the center, to 0.196 percent for an area between 50 and 75 miles, and to 0.06 percent for an area between 225 and 250 miles from the employment center. The results further indicate that employment center counties do have stronger employment effects on neighboring areas than do smaller counties, and that specific industry employment shocks have smaller employment effects on neighboring areas. This is because focusing on one sector such as manufacturing alone ignores the effect of manufacturing shocks on employment in other sectors that are linked with manufacturing, such as for example, transportation, services, etc. What is important to emphasize here is that the relationship is a positive one, which implies that if a firm locates, for example, in a South Carolina county, Georgia will experience employment growth rather than employment loss, and the closer the Georgia counties are to the South Carolina county, the higher their employment growth.

The parameters α and β are the autocorrelation coefficients for counties and surrounding rings. The coefficient α represents the effect of an area's own employment change lagged one year over its current employment, and β represents the same effect lagged two years. There is thus a positive, significant and cross-county similar relationship between the current change in employment and the previous change, and a negative and significant relationship between the current change in employment and change lagged two years, indicating a certain degree of reversion towards initial employment levels two years later. Thus, an employment shock is likely to be enhanced the following year, but dampened in the subsequent year.

In summary, this section has shown that aggressive development policies do not necessarily lead to job losses in neighboring states as employment growth in one region is likely to result in employment growth in neighboring regions and into the following year. These effects are stronger the closer are the regions. Furthermore, since employment shocks propagate over time as well as distance, employment changes in 1999 could be the result of shocks that occurred in previous years.

Conclusion

This report has attempted to determine whether aggressive economic development policies in Georgia's neighboring states have resulted in adverse effects on Georgia's border county employment. We find no evidence of such phenomenon, at least none that has materialized as of 1999. It is possible that effects will not be seen until several years from now. It is important to point out that if such development policies in neighboring states result in the attraction of new employment to, say, South Carolina, but not at the expense of Georgia, they are likely to have positive employment effects on Georgia's employment at the border. As our results have shown, such effects will be positive and strongest in counties located closest to the developing area. The study also has shown that the employment loss in Georgia occurred in MSA or MSA-contiguous counties only. Furthermore, there is evidence of significant employment growth in other Georgia counties, which indicates that employment is lost to other Georgia counties rather than to neighboring states.

References

- Glendon, S. P. and Jacob L. Vigdor (2001) “Thy Neighbor’s Jobs: Geography and Labor Market Dynamics.” *Working Paper*, Duke University.
- Hanson, G. H. (1998) “Market Potential, Increasing Returns, and Geographic Concentration.” NBER Working Paper Number 6429.
- Krugman, P. (1991) “Increasing Returns and Economic Geography.” *Journal of Political Economy* 99, pp. 483-499.

Appendix A

To calculate the employment growth rate, three time-trend regressions were estimated for each county: one used monthly county employment data covering the sub-period 1994-1997, the second covering the sub-period 1998-1999, and the third covering the whole period 1994-1999. The dependent variable is the natural logarithm of the county's monthly employment divided by the nation's monthly employment. Thus, employment fluctuations are measured relative to national employment changes. A zero employment trend means that county employment growth is the same as the nation's, a positive trend means that county employment is growing faster than the nation's, and a negative trend implies that county employment lags behind the nation's. This transformation eliminates national macroeconomic effects as a source of employment changes, and captures changes due only to local economic conditions. Employment is regressed on an intercept and a time variable. This coefficients on time variable equal the growth rate. Using information from these three regressions, one can infer whether county employment trends are different between the two sub-periods, or are similar and thus consistent over the whole period of 1994-1999.

Employment Trends in Georgia Border Counties

Appendix B

EMPLOYMENT CHANGES BY INDUSTRY, GEORGIA BORDER COUNTIES

FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13003	Atkinson	Ag. serv., forestry, fishing, and other	2.1	NA	NA	NA	-10.3
13003	Atkinson	Construction&mining	-19.8	2.6	0.0	-84.8	31.3
13003	Atkinson	Finance, insurance, and real estate	-2.6	NA	NA	NA	8.2
13003	Atkinson	Manufacturing	12.5	-4.3	-2.8	-2.2	14.7
13003	Atkinson	Retail trade	3.7	-0.9	5.4	-36.2	-0.1
13003	Atkinson	Services	10.8	11.0	-0.9	-77.9	-36.9
13003	Atkinson	Transportation and public utilities	-19.4	4.8	10.3	NA	NA
13003	Atkinson	Wholesale trade	-9.5	0.0	210.5	-64.4	18.6
13003	Atkinson	Government and government enterprises	2.9	0.0	6.5	-3.4	3.6
13005	Bacon	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	54.0
13005	Bacon	Construction&mining	-10.1	4.7	3.6	-54.3	-5.4
13005	Bacon	Finance, insurance, and real estate	-13.0	5.4	4.5	-30.8	4.5
13005	Bacon	Manufacturing	4.3	-3.6	-11.8	-12.9	0.3
13005	Bacon	Retail trade	21.1	2.1	-26.6	-13.1	-1.6
13005	Bacon	Services	-6.7	26.6	25.3	-46.4	14.5
13005	Bacon	Transportation and public utilities	-5.1	3.1	17.7	-23.2	8.7
13005	Bacon	Wholesale trade	2.3	15.3	4.6	-20.3	-7.8
13005	Bacon	Government and government enterprises	0.8	-12.6	-19.1	-2.9	-1.9
13007	Baker	Ag. serv., forestry, fishing, and other	142.9	8.8	0.0	118.9	-6.5
13007	Baker	Construction&mining	59.3	0.0	7.0	-19.6	-28.0
13007	Baker	Finance, insurance, and real estate	NA	NA	NA	NA	NA
13007	Baker	Manufacturing	0.0	0.0	0.0	NA	NA
13007	Baker	Retail trade	-18.2	-3.7	7.7	-3.6	-0.4
13007	Baker	Services	106.0	0.4	-7.4	-16.5	1.3
13007	Baker	Transportation and public utilities	NA	NA	NA	NA	NA
13007	Baker	Wholesale trade	-6.1	-3.2	8.3	-18.5	-10.3
13007	Baker	Government and government enterprises	-5.5	7.1	-3.3	-8.6	3.0
13011	Banks	Ag. serv., forestry, fishing, and other	-16.7	10.8	NA	NA	9.1
13011	Banks	Construction&mining	-7.7	11.6	5.0	-28.2	-13.9
13011	Banks	Finance, insurance, and real estate	NA	NA	NA	NA	-3.6
13011	Banks	Manufacturing	-8.4	-7.2	0.5	-8.6	2.3
13011	Banks	Retail trade	5.4	24.1	-8.4	-24.4	8.6
13011	Banks	Services	-0.9	1.3	5.8	-56.6	18.7
13011	Banks	Wholesale trade	6.0	9.4	-5.2	-20.0	-10.0

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13011	Banks	Government and government enterprises	5.1	2.7	3.1	-3.8	6.7
13015	Bartow	Ag. serv., forestry, fishing, and other	-5.3	-6.0	7.4	-29.8	5.4
13015	Bartow	Construction&mining	9.8	-2.2	6.3	-38.5	6.6
13015	Bartow	Finance, insurance, and real estate	11.5	1.4	6.4	-52.6	-0.3
13015	Bartow	Manufacturing	-2.4	1.3	-2.6	-0.2	14.3
13015	Bartow	Retail trade	12.4	15.5	4.1	-16.5	11.3
13015	Bartow	Services	12.5	5.6	15.7	-33.0	3.2
13015	Bartow	Transportation and public utilities	5.8	16.9	2.0	-16.7	27.1
13015	Bartow	Wholesale trade	8.4	-4.6	-21.0	-10.3	14.0
13015	Bartow	Government and government enterprises	4.8	4.3	-0.1	-5.4	1.6
13019	Berrien	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	NA
13019	Berrien	Construction&mining	3.3	9.0	-1.6	-40.8	25.2
13019	Berrien	Finance, insurance, and real estate	2.5	1.5	10.2	-40.1	-13.0
13019	Berrien	Manufacturing	1.5	-1.8	2.7	-3.8	-9.1
13019	Berrien	Retail trade	9.2	5.0	1.1	-17.9	-0.7
13019	Berrien	Services	6.6	7.0	1.3	-57.1	-2.2
13019	Berrien	Transportation and public utilities	6.7	18.9	3.8	-4.4	61.1
13019	Berrien	Wholesale trade	0.7	-3.6	14.1	-7.1	-2.3
13019	Berrien	Government and government enterprises	4.4	2.4	1.5	-5.6	0.1
13025	Brantley	Ag. serv., forestry, fishing, and other	-9.5	9.5	28.7	-46.6	-11.4
13025	Brantley	Construction&mining	22.1	1.7	-0.8	-38.8	-17.1
13025	Brantley	Finance, insurance, and real estate	-14.9	3.2	3.1	-55.2	5.1
13025	Brantley	Manufacturing	-20.5	33.2	4.8	-12.2	-8.6
13025	Brantley	Retail trade	-2.9	20.0	7.5	-30.0	13.8
13025	Brantley	Services	18.7	9.4	-5.4	-70.5	6.6
13025	Brantley	Transportation and public utilities	-9.1	6.2	5.4	-15.8	-38.4
13025	Brantley	Wholesale trade	NA	NA	NA	NA	17.4
13025	Brantley	Government and government enterprises	3.7	2.6	3.9	-1.4	2.9
13027	Brooks	Ag. serv., forestry, fishing, and other	-7.5	10.7	17.7	6.9	-4.5
13027	Brooks	Construction&mining	-50.4	10.0	1.9	-37.6	42.3
13027	Brooks	Finance, insurance, and real estate	3.6	2.3	0.6	-41.9	3.4
13027	Brooks	Retail trade	-1.6	-3.2	-4.4	-36.4	4.8
13027	Brooks	Services	0.7	2.3	9.0	-55.8	18.6
13027	Brooks	Transportation and public utilities	19.1	8.9	0.0	-47.5	133.3
13027	Brooks	Wholesale trade	1.3	-6.5	-2.1	0.7	-19.7
13027	Brooks	Government and government enterprises	-2.7	-2.1	0.8	-1.5	-22.6

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13029	Bryan	Construction&mining	6.2	5.2	6.9	-37.8	23.9
13029	Bryan	Finance, insurance, and real estate	2.5	6.1	3.1	-67.9	-6.9
13029	Bryan	Manufacturing	-2.5	-9.2	-0.3	-22.8	0.2
13029	Bryan	Retail trade	10.1	12.5	-5.1	-25.4	12.7
13029	Bryan	Services	12.6	2.5	7.5	-57.8	6.6
13029	Bryan	Transportation and public utilities	2.5	10.2	8.6	-49.7	2.9
13029	Bryan	Wholesale trade	14.5	15.8	20.9	-40.6	0.4
13029	Bryan	Government and government enterprises	1.5	1.7	5.2	0.6	0.6
13031	Bulloch	Ag. serv., forestry, fishing, and other	15.2	0.4	5.2	-33.4	1.0
13031	Bulloch	Construction&mining	5.7	8.1	13.8	-31.9	12.4
13031	Bulloch	Finance, insurance, and real estate	6.4	2.9	4.3	-51.9	5.0
13031	Bulloch	Manufacturing	10.1	24.0	4.6	-10.7	5.0
13031	Bulloch	Retail trade	10.9	5.7	3.2	-10.8	3.9
13031	Bulloch	Services	5.1	15.8	0.5	-34.9	11.6
13031	Bulloch	Transportation and public utilities	4.0	-0.4	5.2	-24.1	-1.1
13031	Bulloch	Wholesale trade	20.4	-5.0	-4.2	-21.9	8.4
13031	Bulloch	Government and government enterprises	1.1	-1.7	6.3	-9.6	1.1
13033	Burke	Ag. serv., forestry, fishing, and other	18.5	10.9	6.6	-13.7	-18.6
13033	Burke	Construction&mining	4.7	2.0	-2.0	-70.0	71.6
13033	Burke	Finance, insurance, and real estate	3.5	1.7	2.1	-36.0	-1.3
13033	Burke	Manufacturing	-4.1	-9.2	-13.9	-23.7	46.6
13033	Burke	Retail trade	3.6	-2.9	10.6	-26.9	2.1
13033	Burke	Services	NA	NA	NA	NA	14.7
13033	Burke	Transportation and public utilities	NA	NA	NA	NA	NA
13033	Burke	Wholesale trade	15.5	13.1	5.9	-14.7	0.6
13033	Burke	Government and government enterprises	1.8	-1.1	0.5	-11.8	-1.6
13037	Calhoun	Ag. serv., forestry, fishing, and other	36.5	-7.6	-5.0	-28.7	-11.1
13037	Calhoun	Finance, insurance, and real estate	-7.6	5.5	-1.3	-48.7	1.3
13037	Calhoun	Manufacturing	186.3	-0.9	21.1	NA	NA
13037	Calhoun	Retail trade	3.6	1.0	7.0	-39.5	2.1
13037	Calhoun	Services	9.9	2.0	-2.6	-78.3	162.0
13037	Calhoun	Transportation and public utilities	37.0	0.0	-5.4	-54.3	-32.8
13037	Calhoun	Wholesale trade	-5.9	1.1	-3.9	-9.9	-17.4
13037	Calhoun	Government and government enterprises	20.1	0.5	-3.6	-43.3	0.3
13039	Camden	Ag. serv., forestry, fishing, and other	4.8	8.6	1.6	-76.0	25.0
13039	Camden	Construction&mining	21.7	14.9	-3.6	-38.7	14.7
13039	Camden	Finance, insurance, and real estate	1.4	-0.9	3.9	-48.7	1.0
13039	Camden	Manufacturing	-2.3	0.8	-3.5	-5.6	-4.3
13039	Camden	Retail trade	4.3	-0.1	3.5	-12.6	0.7

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13039	Camden	Transportation and public utilities	4.1	-2.4	-2.5	-41.8	55.2
13039	Camden	Wholesale trade	15.1	9.1	44.4	-41.0	3.9
13039	Camden	Government and government enterprises	-7.5	1.1	1.3	-54.0	-2.7
13045	Carroll	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	11.5
13045	Carroll	Construction&mining	9.0	7.5	9.2	-41.0	-5.0
13045	Carroll	Finance, insurance, and real estate	-0.5	3.5	1.7	-33.5	2.8
13045	Carroll	Manufacturing	-2.5	-1.3	-3.3	-6.0	-2.9
13045	Carroll	Retail trade	9.5	6.9	1.0	-17.2	2.4
13045	Carroll	Services	6.4	2.3	3.7	-33.3	3.1
13045	Carroll	Transportation and public utilities	-4.3	-0.4	-4.1	-23.3	22.6
13045	Carroll	Wholesale trade	8.5	-9.1	4.3	-12.2	16.5
13045	Carroll	Government and government enterprises	3.1	4.4	2.5	-4.4	-0.4
13047	Catoosa	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	-2.9
13047	Catoosa	Construction&mining	0.0	5.7	1.0	-59.7	-2.1
13047	Catoosa	Finance, insurance, and real estate	3.6	5.8	7.0	-47.2	14.8
13047	Catoosa	Manufacturing	7.2	-3.1	-5.2	-1.5	16.8
13047	Catoosa	Retail trade	8.7	6.8	-0.3	-19.2	-3.4
13047	Catoosa	Services	7.9	24.2	12.3	-38.4	1.4
13047	Catoosa	Transportation and public utilities	-8.0	23.2	-1.6	-30.9	6.7
13047	Catoosa	Wholesale trade	13.3	1.6	-24.0	-8.5	10.6
13049	Charlton	Ag. serv., forestry, fishing, and other	40.0	28.6	13.3	-9.8	-7.1
13049	Charlton	Construction&mining	-37.2	3.3	37.1	-4.7	-33.5
13049	Charlton	Finance, insurance, and real estate	-4.7	10.9	6.3	-54.6	-8.8
13049	Charlton	Manufacturing	-8.8	-15.5	-7.1	-6.2	27.8
13049	Charlton	Retail trade	-3.7	-0.4	5.4	-21.9	16.4
13049	Charlton	Services	8.4	-1.5	-0.9	-46.9	57.1
13049	Charlton	Transportation and public utilities	8.7	17.3	9.1	-40.6	2.9
13049	Charlton	Wholesale trade	-10.8	18.2	7.7	-11.9	12.2
13049	Charlton	Government and government enterprises	7.2	2.5	-1.5	-6.4	2.5
13051	Chatham	Ag. serv., forestry, fishing, and other	-1.1	1.5	10.5	-37.6	17.2
13051	Chatham	Construction&mining	2.2	5.8	6.2	-25.8	3.4
13051	Chatham	Finance, insurance, and real estate	1.6	1.4	3.1	-41.1	-1.1
13051	Chatham	Manufacturing	-1.6	-0.1	4.9	-2.2	-1.6
13051	Chatham	Retail trade	6.3	2.6	-1.3	-9.9	3.7
13051	Chatham	Services	3.0	5.3	3.0	-24.3	4.9
13051	Chatham	Transportation and public utilities	-0.3	-2.2	1.5	-21.7	-0.3
13051	Chatham	Wholesale trade	-2.3	-4.7	2.4	-16.0	8.6
13051	Chatham	Government and government enterprises	4.3	-0.6	-3.5	-25.4	-0.7

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13053	Chatta- hoochee	Finance, insurance, and real estate	-4.0	4.2	4.0	NA	NA
13053	Chatta- hoochee	Manufacturing	NA	NA	NA	NA	NA
13053	Chatta- hoochee	Retail trade	NA	NA	NA	NA	NA
13053	Chatta- hoochee	Services	-2.1	49.9	-8.2	-38.2	7.7
13053	Chatta- hoochee	Transportation and public utilities	-9.1	130.0	21.7	-10.7	-2.4
13053	Chatta- hoochee	Wholesale trade	NA	NA	NA	NA	NA
13053	Chatta- hoochee	Government and government enterprises	-29.1	0.7	3.8	-98.5	1.0
13055	Chattooga	Ag. serv., forestry, fishing, and other	2.9	5.6	7.9	NA	NA
13055	Chattooga	Construction&mining	25.6	4.6	3.8	-63.1	6.1
13055	Chattooga	Finance, insurance, and real estate	1.9	3.4	0.7	-42.0	2.3
13055	Chattooga	Manufacturing	2.8	0.7	-5.1	-1.6	5.9
13055	Chattooga	Retail trade	5.2	1.0	4.0	-24.8	-1.5
13055	Chattooga	Services	6.6	4.3	2.0	-53.6	-4.5
13055	Chattooga	Wholesale trade	34.8	-2.3	-35.1	-25.9	9.8
13055	Chattooga	Government and government enterprises	-4.4	0.9	-3.0	-40.2	-0.2
13061	Clay	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	-1.6
13061	Clay	Construction&mining	7.7	14.3	-3.8	-31.2	17.6
13061	Clay	Finance, insurance, and real estate	0.0	5.1	0.0	-68.3	3.8
13061	Clay	Manufacturing	-16.0	-7.1	28.2	NA	NA
13061	Clay	Retail trade	4.2	6.7	6.3	-34.7	-4.0
13061	Clay	Services	5.1	1.6	-0.5	-46.8	7.6
13061	Clay	Transportation and public utilities	NA	NA	NA	NA	NA
13061	Clay	Wholesale trade	-9.4	20.7	22.9	-16.3	-9.4
13061	Clay	Government and government enterprises	7.7	-4.2	-3.1	1.3	0.7
13065	Clinch	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	2.6
13065	Clinch	Construction&mining	8.3	-45.0	5.6	-82.9	76.9
13065	Clinch	Finance, insurance, and real estate	16.4	11.3	30.4	-19.4	-3.6
13065	Clinch	Manufacturing	-0.2	-3.7	31.1	5.7	-25.5
13065	Clinch	Retail trade	3.5	3.0	-3.4	-18.9	-6.8
13065	Clinch	Services	-1.9	5.7	1.4	-54.4	-28.4
13065	Clinch	Transportation and public utilities	-4.5	9.5	11.6	-44.2	-8.5
13065	Clinch	Wholesale trade	NA	NA	NA	NA	-0.7
13065	Clinch	Government and government enterprises	4.3	-2.7	-0.2	-2.5	-0.5
13069	Coffee	Ag. serv., forestry, fishing, and other	14.2	0.0	6.4	31.4	-12.3
13069	Coffee	Construction&mining	-4.0	6.1	2.4	-36.5	14.0
13069	Coffee	Finance, insurance, and real estate	2.9	-0.5	-3.2	-43.7	3.9

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13069	Coffee	Retail trade	3.6	3.3	-1.3	-8.0	10.3
13069	Coffee	Services	34.5	6.3	4.6	-27.5	29.3
13069	Coffee	Transportation and public utilities	15.8	9.8	3.2	-56.6	14.5
13069	Coffee	Wholesale trade	9.6	-6.6	6.9	5.3	19.6
13069	Coffee	Government and government enterprises	-18.3	1.6	-0.2	-2.2	-0.9
13071	Colquitt	Ag. serv., forestry, fishing, and other	13.4	6.6	-12.5	62.1	-9.0
13071	Colquitt	Construction&mining	23.3	2.6	8.1	-30.0	-2.7
13071	Colquitt	Finance, insurance, and real estate	8.7	3.8	3.9	-43.0	1.7
13071	Colquitt	Retail trade	2.1	13.1	17.0	-22.5	-4.7
13071	Colquitt	Services	4.3	2.0	2.0	-47.0	2.9
13071	Colquitt	Transportation and public utilities	-7.9	10.7	0.9	-34.6	-9.0
13071	Colquitt	Wholesale trade	12.6	6.4	-0.5	-17.9	-28.7
13071	Colquitt	Government and government enterprises	8.1	6.7	0.8	-4.0	0.5
13073	Columbia	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	1.8
13073	Columbia	Construction&mining	2.7	5.1	0.7	-33.0	16.9
13073	Columbia	Finance, insurance, and real estate	8.7	3.9	-4.9	-60.9	4.4
13073	Columbia	Manufacturing	5.9	-2.9	7.1	-1.7	-22.6
13073	Columbia	Retail trade	12.2	7.2	5.8	-25.3	11.2
13073	Columbia	Services	9.8	5.4	3.3	-34.8	12.0
13073	Columbia	Transportation and public utilities	6.7	4.3	11.8	-21.6	13.5
13073	Columbia	Wholesale trade	3.4	13.8	-8.0	-21.0	-1.0
13073	Columbia	Government and government enterprises	-4.5	3.9	0.8	-9.2	1.5
13075	Cook	Ag. serv., forestry, fishing, and other	9.4	4.8	5.1	223.8	7.9
13075	Cook	Construction&mining	-3.3	-5.8	14.0	-38.2	4.5
13075	Cook	Finance, insurance, and real estate	4.6	6.8	0.9	-41.6	6.8
13075	Cook	Manufacturing	3.1	6.1	2.5	-6.1	4.2
13075	Cook	Retail trade	-1.2	2.1	7.5	-15.2	1.6
13075	Cook	Services	2.9	2.3	-1.6	-39.3	-5.2
13075	Cook	Transportation and public utilities	45.3	0.9	25.5	-60.1	-20.7
13075	Cook	Wholesale trade	13.6	-6.6	6.4	-17.2	5.1
13075	Cook	Government and government enterprises	-4.6	4.4	3.3	-4.5	4.5
13077	Coweta	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	2.4
13077	Coweta	Construction&mining	14.2	3.6	5.5	-48.6	44.5
13077	Coweta	Finance, insurance, and real estate	4.9	6.7	3.2	-54.9	15.5
13077	Coweta	Manufacturing	5.9	-3.4	1.2	0.7	1.4
13077	Coweta	Retail trade	19.7	14.7	8.6	-13.2	-4.7
13077	Coweta	Services	6.4	11.5	-0.6	-37.4	6.9
13077	Coweta	Transportation and public utilities	0.3	-3.4	-2.2	-22.7	5.0
13077	Coweta	Wholesale trade	14.9	3.9	10.2	-7.7	-4.0

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13077	Coweta	Government and government enterprises	6.0	5.8	3.6	-3.5	13.5
13083	Dade	Ag. serv., forestry, fishing, and other	-11.6	5.3	5.0	NA	NA
13083	Dade	Retail trade	3.0	-1.5	20.0	-23.6	0.1
13083	Dade	Services	-8.6	3.9	0.9	-59.4	7.0
13083	Dade	Transportation and public utilities	30.5	6.4	2.7	-74.9	3.2
13083	Dade	Wholesale trade	-4.0	-56.3	-17.5	-28.8	21.7
13083	Dade	Government and government enterprises	4.9	-0.3	2.6	-7.5	2.1
13087	Decatur	Ag. serv., forestry, fishing, and other	24.9	10.2	1.5	-22.4	35.0
13087	Decatur	Construction&mining	14.8	-9.1	4.0	-38.7	4.4
13087	Decatur	Finance, insurance, and real estate	8.9	0.0	1.6	-47.8	5.7
13087	Decatur	Manufacturing	0.3	-0.5	7.5	2.6	-4.7
13087	Decatur	Retail trade	17.0	6.9	-6.4	-20.7	-3.6
13087	Decatur	Services	NA	NA	NA	NA	-21.3
13087	Decatur	Transportation and public utilities	1.2	-2.7	2.4	-38.8	-6.0
13087	Decatur	Wholesale trade	-6.4	-10.7	1.8	-15.7	-1.3
13087	Decatur	Government and government enterprises	0.9	0.0	1.1	-3.9	2.6
13097	Douglas	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	1.9
13097	Douglas	Construction&mining	13.2	8.2	9.0	-38.8	1.5
13097	Douglas	Finance, insurance, and real estate	1.7	3.9	4.0	-47.1	-1.0
13097	Douglas	Manufacturing	23.1	13.9	7.8	5.4	14.2
13097	Douglas	Retail trade	8.4	8.9	2.1	-11.5	7.5
13097	Douglas	Services	5.1	-0.5	5.2	-34.1	14.3
13097	Douglas	Transportation and public utilities	-3.0	-0.9	6.3	-29.1	9.3
13097	Douglas	Wholesale trade	5.9	8.1	9.1	-20.0	3.2
13097	Douglas	Government and government enterprises	3.2	2.9	4.7	-4.1	4.0
13099	Early	Ag. serv., forestry, fishing, and other	1.9	10.9	-5.7	-37.1	-9.4
13099	Early	Construction&mining	11.5	-6.3	-0.6	-47.9	38.8
13099	Early	Finance, insurance, and real estate	30.8	9.8	30.8	-18.6	-25.9
13099	Early	Manufacturing	-0.8	-9.5	-7.2	-12.9	-2.5
13099	Early	Retail trade	3.4	8.6	-10.1	-21.5	-4.2
13099	Early	Services	5.6	-0.9	6.2	-36.7	11.4
13099	Early	Transportation and public utilities	-12.2	2.3	0.0	-50.4	-24.0
13099	Early	Wholesale trade	5.2	11.5	4.5	24.0	8.1
13101	Echols	Ag. serv., forestry, fishing, and other	3.1	6.1	168.6	361.7	15.3
13101	Echols	Construction&mining	NA	NA	NA	NA	NA
13101	Echols	Finance, insurance, and real estate	NA	NA	NA	NA	NA
13101	Echols	Manufacturing	147.1	0.0	9.5	-58.7	18.4
13101	Echols	Retail trade	6.7	0.0	-3.1	-64.5	18.2
13101	Echols	Services	2.2	6.4	2.0	NA	NA

Employment Trends in Georgia Border Counties

FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13101	Echols	Transportation and public utilities	NA	NA	NA	NA	-12.4
13101	Echols	Wholesale trade	NA	NA	NA	NA	NA
13101	Echols	Government and government enterprises	3.1	1.8	3.6	-86.9	3.2
13103	Effingham	Ag. serv., forestry, fishing, and other	-20.5	14.0	8.5	-22.6	2.1
13103	Effingham	Construction&mining	-1.3	1.2	3.0	-37.1	-3.6
13103	Effingham	Finance, insurance, and real estate	7.1	8.1	4.0	-59.9	18.7
13103	Effingham	Manufacturing	-0.8	1.3	1.4	5.3	6.3
13103	Effingham	Retail trade	11.3	19.7	9.7	-17.7	10.1
13103	Effingham	Services	15.0	3.8	4.7	-71.4	6.2
13103	Effingham	Transportation and public utilities	-0.6	4.7	9.0	-55.6	12.2
13103	Effingham	Wholesale trade	-4.8	11.4	3.4	-36.3	7.3
13103	Effingham	Government and government enterprises	4.5	1.6	4.5	-3.7	3.7
13105	Elbert	Ag. serv., forestry, fishing, and other	63.8	-14.3	-9.1	26.7	-11.6
13105	Elbert	Construction&mining	-7.1	-2.7	-2.3	-53.6	0.8
13105	Elbert	Finance, insurance, and real estate	0.6	10.0	-0.6	-31.1	12.8
13105	Elbert	Manufacturing	1.8	1.0	0.0	-10.2	5.1
13105	Elbert	Retail trade	10.5	-2.9	1.3	-23.9	3.4
13105	Elbert	Services	3.1	-1.2	2.4	-60.5	1.1
13105	Elbert	Transportation and public utilities	-2.8	1.9	20.4	-31.5	-5.2
13105	Elbert	Wholesale trade	12.0	-1.5	-3.4	-15.0	10.4
13105	Elbert	Government and government enterprises	5.0	0.6	0.5	-4.9	-1.8
13111	Fannin	Ag. serv., forestry, fishing, and other	-1.4	2.9	NA	NA	46.7
13111	Fannin	Construction&mining	4.1	9.6	-0.3	-67.6	12.6
13111	Fannin	Finance, insurance, and real estate	12.6	2.3	7.4	-60.8	1.6
13111	Fannin	Manufacturing	-6.1	-1.1	-4.0	-14.0	-4.0
13111	Fannin	Retail trade	7.1	4.1	1.9	-20.8	13.9
13111	Fannin	Services	4.5	5.0	2.5	-43.7	0.4
13111	Fannin	Wholesale trade	2.4	2.9	NA	NA	3.3
13111	Fannin	Government and government enterprises	0.0	5.1	2.2	-7.0	0.4
13115	Floyd	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	22.5
13115	Floyd	Construction&mining	-24.6	8.7	-1.6	-44.2	-6.1
13115	Floyd	Finance, insurance, and real estate	1.6	1.2	3.1	-44.1	-3.2
13115	Floyd	Manufacturing	-2.3	-3.3	-1.7	-4.2	-3.8
13115	Floyd	Retail trade	2.2	-1.4	3.2	-18.4	2.3
13115	Floyd	Services	2.1	5.3	0.7	-21.0	0.1
13115	Floyd	Transportation and public utilities	1.1	-1.0	-1.8	-23.9	9.6
13115	Floyd	Wholesale trade	13.4	13.5	7.6	-24.8	2.8
13115	Floyd	Government and govt. enterprises	1.5	-0.6	1.9	-25.5	1.2

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13119	Franklin	Construction&mining	-18.9	-4.0	3.5	-53.2	34.2
13119	Franklin	Finance, insurance, and real estate	4.2	6.7	7.6	-56.8	2.5
13119	Franklin	Manufacturing	3.7	-6.7	-0.6	5.6	3.7
13119	Franklin	Retail trade	27.0	7.6	-0.8	-21.6	4.8
13119	Franklin	Services	10.1	9.1	4.9	-43.5	0.0
13119	Franklin	Transportation and public utilities	33.8	13.8	-4.9	-23.0	40.5
13119	Franklin	Wholesale trade	7.4	21.6	28.6	-46.6	-2.4
13119	Franklin	Government and government enterprises	1.8	1.8	1.8	-6.4	0.8
13121	Fulton	Ag. serv., forestry, fishing, and other	6.1	-0.1	6.6	-28.7	10.4
13121	Fulton	Construction&mining	6.3	7.3	-3.0	-19.5	11.7
13121	Fulton	Finance, insurance, and real estate	3.1	2.7	3.3	-20.2	0.3
13121	Fulton	Manufacturing	7.5	-1.1	-2.6	-1.4	0.1
13121	Fulton	Retail trade	2.8	6.2	-0.5	-8.3	2.7
13121	Fulton	Services	6.1	7.4	3.2	-18.2	5.9
13121	Fulton	Transportation and public utilities	7.2	6.8	3.3	-8.3	7.1
13121	Fulton	Wholesale trade	-5.5	4.2	4.5	-5.1	-2.2
13121	Fulton	Government and government enterprises	-0.1	-1.1	0.7	-4.7	0.3
13123	Gilmer	Ag. serv., forestry, fishing, and other	64.0	8.9	1.9	-91.4	NA
13123	Gilmer	Construction&mining	8.7	16.8	-0.4	-64.6	22.7
13123	Gilmer	Finance, insurance, and real estate	2.1	6.3	0.8	-62.6	-3.8
13123	Gilmer	Retail trade	7.0	5.9	6.5	-22.9	4.5
13123	Gilmer	Services	NA	NA	NA	NA	7.2
13123	Gilmer	Transportation and public utilities	8.6	2.5	1.5	-49.3	19.8
13123	Gilmer	Wholesale trade	12.9	19.8	-0.6	10.3	1.9
13123	Gilmer	Government and government enterprises	1.3	6.1	3.0	-3.8	3.1
13127	Glynn	Ag. serv., forestry, fishing, and other	-0.7	8.0	-1.7	-48.9	19.1
13127	Glynn	Construction&mining	11.5	2.5	7.3	-28.5	-7.7
13127	Glynn	Finance, insurance, and real estate	5.9	9.1	7.3	-41.3	-24.8
13127	Glynn	Manufacturing	-1.6	2.0	-2.9	-0.7	2.6
13127	Glynn	Retail trade	4.2	2.0	-2.3	-12.7	6.3
13127	Glynn	Services	6.6	1.8	0.4	-23.5	3.6
13127	Glynn	Transportation and public utilities	14.8	1.9	7.1	0.2	33.1
13127	Glynn	Wholesale trade	3.2	11.4	-2.5	-16.2	-2.1
13127	Glynn	Government and government enterprises	1.8	0.0	0.4	-5.9	2.3
13129	Gordon	Ag. serv., forestry, fishing, and other	52.3	5.8	14.9	-66.8	6.7
13129	Gordon	Construction&mining	-5.5	1.4	9.7	-47.2	33.9
13129	Gordon	Finance, insurance, and real estate	9.2	5.1	1.9	-50.6	8.7
13129	Gordon	Manufacturing	0.5	1.3	-0.3	-2.3	2.4
13129	Gordon	Retail trade	5.3	11.0	8.3	-19.8	7.8

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13129	Gordon	Transportation and public utilities	0.4	-25.2	11.1	-31.2	-27.3
13129	Gordon	Wholesale trade	17.5	-2.5	6.2	-15.3	-6.8
13129	Gordon	Government and government enterprises	2.9	4.0	0.6	-3.8	3.0
13131	Grady	Ag. serv., forestry, fishing, and other	-10.8	6.6	NA	NA	2.3
13131	Grady	Construction&mining	19.6	-0.4	-12.8	-46.1	-5.8
13131	Grady	Finance, insurance, and real estate	7.4	3.2	3.6	-50.4	-8.4
13131	Grady	Manufacturing	-6.7	-4.7	-17.7	-7.5	-18.7
13131	Grady	Retail trade	4.3	4.7	4.3	-18.4	-0.2
13131	Grady	Services	4.1	4.6	-3.2	-52.5	4.1
13131	Grady	Transportation and public utilities	3.1	10.9	-0.4	-25.2	6.7
13131	Grady	Wholesale trade	15.6	6.3	0.2	-25.7	0.4
13131	Grady	Government and government enterprises	1.8	-0.6	2.3	-4.0	2.8
13137	Habersham	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	6.1
13137	Habersham	Finance, insurance, and real estate	5.9	1.4	6.0	-45.3	9.1
13137	Habersham	Manufacturing	3.6	-7.8	-4.5	-2.4	0.9
13137	Habersham	Retail trade	8.1	4.7	2.6	-18.0	4.1
13137	Habersham	Services	6.9	9.3	3.7	-37.6	14.6
13137	Habersham	Transportation and public utilities	-3.9	7.7	7.9	-25.2	-7.9
13137	Habersham	Wholesale trade	14.2	-7.8	1.4	-15.8	0.8
13137	Habersham	Government and government enterprises	0.1	-1.0	1.7	-4.4	0.9
13143	Haralson	Ag. serv., forestry, fishing, and other	56.9	10.0	-3.4	-63.5	23.6
13143	Haralson	Construction&mining	2.0	2.5	3.7	-65.8	18.9
13143	Haralson	Finance, insurance, and real estate	-1.8	1.8	2.2	-60.1	10.2
13143	Haralson	Manufacturing	0.8	-5.3	-3.4	-6.3	3.7
13143	Haralson	Retail trade	-17.8	13.6	-2.5	-20.7	8.6
13143	Haralson	Services	6.2	-2.4	0.3	-46.5	16.5
13143	Haralson	Transportation and public utilities	11.3	7.8	6.9	-53.8	6.4
13143	Haralson	Wholesale trade	2.2	-10.1	-5.6	-11.9	-5.3
13143	Haralson	Government and government enterprises	1.6	5.7	6.2	-7.0	-5.2
13145	Harris	Ag. serv., forestry, fishing, and other	-2.7	5.6	9.6	-53.6	-11.9
13145	Harris	Construction&mining	6.4	1.4	-4.9	-62.7	-5.7
13145	Harris	Finance, insurance, and real estate	-9.0	3.6	2.2	-72.4	-14.7
13145	Harris	Manufacturing	-23.2	50.4	14.2	NA	NA
13145	Harris	Retail trade	12.6	0.5	3.1	-30.7	9.8
13145	Harris	Services	3.9	5.3	0.1	-41.9	-3.1
13145	Harris	Transportation and public utilities	-0.6	12.9	5.1	-58.2	5.9
13145	Harris	Wholesale trade	7.8	0.0	-10.9	-34.7	-19.5
13145	Harris	Government and govt. enterprises	11.0	7.8	-0.2	-5.1	8.6

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13147	Hart	Construction&mining	6.2	-4.5	-0.2	-59.3	40.9
13147	Hart	Finance, insurance, and real estate	NA	NA	NA	NA	6.9
13147	Hart	Manufacturing	-8.7	-4.3	0.7	6.1	7.0
13147	Hart	Retail trade	4.0	8.3	3.4	-20.2	8.4
13147	Hart	Services	9.8	7.3	4.0	-47.7	25.2
13147	Hart	Transportation and public utilities	1.4	-2.1	1.1	-14.7	7.1
13147	Hart	Wholesale trade	-0.4	-6.6	-5.2	-21.9	-12.4
13149	Heard	Ag. serv., forestry, fishing, and other	-11.5	49.4	18.9	NA	NA
13149	Heard	Construction&mining	13.6	0.4	7.7	-57.7	49.7
13149	Heard	Finance, insurance, and real estate	NA	NA	NA	NA	0.0
13149	Heard	Manufacturing	-0.2	-11.8	21.0	53.2	-13.6
13149	Heard	Retail trade	0.5	-3.3	-1.5	-41.6	-2.9
13149	Heard	Services	1.9	0.5	-1.8	-68.3	16.9
13149	Heard	Transportation and public utilities	NA	NA	NA	NA	NA
13149	Heard	Wholesale trade	-30.4	25.0	-10.0	NA	NA
13149	Heard	Government and government enterprises	2.3	2.0	2.3	-2.8	-3.3
13163	Jefferson	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	-0.2
13163	Jefferson	Construction&mining	22.0	-1.6	3.9	-40.3	121.1
13163	Jefferson	Finance, insurance, and real estate	5.2	7.3	4.9	-31.2	9.9
13163	Jefferson	Manufacturing	-1.8	-11.3	-8.2	-3.5	-6.8
13163	Jefferson	Retail trade	6.6	1.1	2.2	-23.6	7.3
13163	Jefferson	Services	0.2	-0.1	3.6	-54.3	1.1
13163	Jefferson	Transportation and public utilities	-6.5	5.6	4.1	-20.4	-2.5
13163	Jefferson	Wholesale trade	-1.6	-5.3	11.8	-36.8	-17.4
13163	Jefferson	Government and government enterprises	2.3	2.6	-0.8	-6.7	1.6
13165	Jenkins	Ag. serv., forestry, fishing, and other	0.0	6.1	2.9	8.3	-5.9
13165	Jenkins	Construction&mining	16.2	-1.2	12.9	-71.9	36.1
13165	Jenkins	Finance, insurance, and real estate	10.9	0.0	-6.1	-45.2	-18.5
13165	Jenkins	Manufacturing	8.9	16.4	6.5	-1.4	3.2
13165	Jenkins	Retail trade	2.6	-3.7	16.5	-28.8	3.4
13165	Jenkins	Services	4.6	1.4	4.4	-59.0	-8.1
13165	Jenkins	Transportation and public utilities	-1.2	0.0	-3.6	-43.8	-6.5
13165	Jenkins	Wholesale trade	11.9	-9.6	-18.8	-13.0	-9.1
13165	Jenkins	Government and government enterprises	0.6	-3.6	1.0	-5.0	0.9
13173	Lanier	Ag. serv., forestry, fishing, and other	2.2	8.7	20.0	NA	NA
13173	Lanier	Construction&mining	14.5	11.5	4.4	-56.6	24.0
13173	Lanier	Finance, insurance, and real estate	NA	NA	NA	NA	NA
13173	Lanier	Manufacturing	-16.2	-67.1	36.3	-14.7	6.7
13173	Lanier	Retail trade	14.4	10.9	2.2	-27.5	0.5
13173	Lanier	Services	-4.7	9.4	3.2	-50.9	-2.8

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13173	Lanier	Wholesale trade	NA	NA	NA	NA	NA
13173	Lanier	Government and government enterprises	14.1	-0.8	1.6	-5.3	2.6
13181	Lincoln	Ag. serv., forestry, fishing, and other	10.7	6.0	4.5	NA	NA
13181	Lincoln	Construction&mining	0.0	-7.8	8.5	-29.1	-33.5
13181	Lincoln	Finance, insurance, and real estate	2.2	2.1	10.4	-62.3	1.3
13181	Lincoln	Manufacturing	-11.3	-5.0	4.8	-20.6	-1.9
13181	Lincoln	Retail trade	15.1	3.4	-1.4	-32.3	4.3
13181	Lincoln	Services	10.6	0.0	1.3	-68.0	7.2
13181	Lincoln	Transportation and public utilities	9.9	1.1	43.3	-40.3	23.7
13181	Lincoln	Wholesale trade	-4.3	-6.8	26.8	-50.0	27.9
13181	Lincoln	Government and government enterprises	-2.5	0.0	3.9	-5.0	-0.7
13185	Lowndes	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	10.5
13185	Lowndes	Construction&mining	12.4	7.4	2.0	-25.3	9.8
13185	Lowndes	Finance, insurance, and real estate	1.4	5.6	3.9	-46.3	-3.7
13185	Lowndes	Manufacturing	1.7	3.7	1.5	-0.3	-0.9
13185	Lowndes	Retail trade	6.8	7.4	4.9	-7.8	1.1
13185	Lowndes	Services	7.2	3.8	2.1	-33.7	6.4
13185	Lowndes	Transportation and public utilities	6.1	5.7	6.7	-13.6	8.7
13185	Lowndes	Wholesale trade	14.9	-5.2	-8.9	-21.3	0.5
13185	Lowndes	Government and government enterprises	0.0	1.3	4.3	-22.4	1.9
13187	Lumpkin	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	23.8
13187	Lumpkin	Construction&mining	38.2	4.6	-1.0	-68.3	12.8
13187	Lumpkin	Finance, insurance, and real estate	15.3	6.2	10.3	-44.9	-10.9
13187	Lumpkin	Manufacturing	1.9	-12.6	-3.3	0.5	27.3
13187	Lumpkin	Retail trade	9.4	3.9	24.5	-18.6	5.3
13187	Lumpkin	Services	10.0	7.5	2.3	-44.7	10.5
13187	Lumpkin	Transportation and public utilities	34.9	1.7	21.2	-29.0	1.3
13187	Lumpkin	Wholesale trade	-14.1	7.3	84.7	-5.5	9.5
13187	Lumpkin	Government and government enterprises	4.7	1.0	3.9	-49.4	3.8
13189	McDuffie	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	4.6
13189	McDuffie	Construction&mining	-6.7	-5.6	4.3	-37.9	29.5
13189	McDuffie	Finance, insurance, and real estate	6.9	0.6	-3.5	-48.8	-2.0
13189	McDuffie	Retail trade	2.9	8.0	0.1	-15.7	-2.0
13189	McDuffie	Services	-0.1	9.5	-2.3	-35.9	-0.7
13189	McDuffie	Transportation and public utilities	-19.7	1.6	-1.6	-38.8	5.4
13189	McDuffie	Wholesale trade	-6.9	-19.5	-13.4	-17.4	12.0
13189	McDuffie	Government and government enterprises	1.6	3.6	0.9	-5.4	3.6

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13195	Madison	Construction&mining	10.0	2.7	5.8	-55.0	12.0
13195	Madison	Finance, insurance, and real estate	15.7	6.6	6.6	-63.1	-0.3
13195	Madison	Manufacturing	-10.7	-10.4	-19.2	105.8	0.5
13195	Madison	Retail trade	12.3	11.8	3.5	-40.1	4.2
13195	Madison	Services	7.3	4.2	-1.3	-69.0	18.6
13195	Madison	Transportation and public utilities	-10.0	11.7	8.8	-45.7	2.3
13195	Madison	Wholesale trade	15.1	-7.1	-9.8	-21.7	2.3
13195	Madison	Government and government enterprises	-2.2	2.2	4.0	-8.0	6.5
13197	Marion	Ag. serv., forestry, fishing, and other	38.4	16.0	13.0	-38.5	-16.3
13197	Marion	Construction&mining	60.0	-16.9	-18.6	-89.1	47.5
13197	Marion	Finance, insurance, and real estate	4.3	2.1	46.9	-58.3	9.3
13197	Marion	Manufacturing	-2.9	-15.0	14.5	NA	NA
13197	Marion	Retail trade	14.7	-7.7	-2.8	-40.0	8.8
13197	Marion	Services	4.2	24.4	5.2	-63.2	5.9
13197	Marion	Transportation and public utilities	7.7	31.0	12.7	-74.2	7.8
13197	Marion	Wholesale trade	21.1	8.7	-8.0	-43.5	24.3
13197	Marion	Government and government enterprises	-2.9	2.8	3.1	-4.3	0.6
13199	Meriwether	Ag. serv., forestry, fishing, and other	6.7	4.3	6.9	-59.3	36.1
13199	Meriwether	Construction&mining	49.3	5.1	7.0	-75.3	-2.1
13199	Meriwether	Finance, insurance, and real estate	-2.2	3.7	3.9	-92.0	2.1
13199	Meriwether	Manufacturing	-5.7	-2.2	-0.4	-12.6	-0.4
13199	Meriwether	Retail trade	4.0	6.7	5.3	-52.6	4.3
13199	Meriwether	Services	3.3	5.5	3.2	-85.7	2.7
13199	Meriwether	Transportation and public utilities	8.6	10.1	6.6	-79.2	-11.9
13199	Meriwether	Wholesale trade	-7.7	-3.3	-12.0	-71.9	28.0
13199	Meriwether	Government and government enterprises	0.7	-3.5	-2.8	-5.4	-1.8
13201	Miller	Ag. serv., forestry, fishing, and other	-12.5	-3.9	0.0	1.4	38.4
13201	Miller	Finance, insurance, and real estate	10.8	27.2	19.7	-33.6	3.8
13201	Miller	Manufacturing	-18.9	-11.6	-2.6	-40.5	4.6
13201	Miller	Retail trade	9.5	4.6	7.8	-29.3	-0.8
13201	Miller	Services	15.0	2.1	3.7	-61.2	12.0
13201	Miller	Transportation and public utilities	20.0	16.7	0.0	0.0	8.9
13201	Miller	Wholesale trade	15.0	-2.4	5.9	0.9	20.3
13201	Miller	Government and government enterprises	10.0	-29.5	0.6	-7.7	2.8
13205	Mitchell	Ag. serv., forestry, fishing, and other	-2.2	2.5	-4.3	34.8	5.2
13205	Mitchell	Construction&mining	4.0	6.5	-2.3	-55.2	3.5
13205	Mitchell	Finance, insurance, and real estate	-2.9	4.2	0.6	-39.7	0.2
13205	Mitchell	Manufacturing	8.6	10.5	4.9	NA	NA
13205	Mitchell	Retail trade	15.4	-8.1	-4.8	-22.0	0.9

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13205	Mitchell	Transportation and public utilities	-0.9	3.4	-3.3	1.7	-38.8
13205	Mitchell	Wholesale trade	1.0	3.3	-15.8	-6.7	-11.6
13205	Mitchell	Government and government enterprises	3.1	3.9	-1.0	-3.3	-7.8
13213	Murray	Ag. serv., forestry, fishing, and other	26.2	27.4	1.5	-24.8	4.5
13213	Murray	Construction&mining	1.0	-8.2	-4.6	-57.3	13.8
13213	Murray	Finance, insurance, and real estate	6.2	0.7	5.1	-46.7	7.3
13213	Murray	Manufacturing	3.1	-3.9	-5.7	3.0	6.8
13213	Murray	Retail trade	7.6	6.7	3.7	-22.7	25.4
13213	Murray	Services	22.5	15.3	-7.0	-38.2	-3.6
13213	Murray	Transportation and public utilities	6.9	7.9	8.3	-23.7	39.7
13213	Murray	Wholesale trade	-14.3	-2.7	15.1	-2.7	-0.8
13213	Murray	Government and government enterprises	-7.2	2.2	-0.6	-5.8	2.8
13215	Muscogee	Ag. serv., forestry, fishing, and other	4.7	6.8	-0.1	-29.4	13.3
13215	Muscogee	Construction&mining	5.3	4.7	2.8	-21.7	6.7
13215	Muscogee	Finance, insurance, and real estate	1.9	1.8	7.5	-25.6	0.9
13215	Muscogee	Manufacturing	3.0	-1.7	0.6	-2.4	-3.3
13215	Muscogee	Retail trade	3.7	2.2	5.9	-11.2	0.5
13215	Muscogee	Services	5.1	9.0	2.7	-19.8	5.0
13215	Muscogee	Transportation and public utilities	3.2	7.1	2.5	-12.3	5.2
13215	Muscogee	Wholesale trade	1.2	6.6	3.2	-27.9	-7.4
13221	Oglethorpe	Ag. serv., forestry, fishing, and other	37.6	29.1	9.3	13.3	2.6
13221	Oglethorpe	Construction&mining	23.3	6.8	-2.4	-28.0	-20.1
13221	Oglethorpe	Finance, insurance, and real estate	9.6	7.7	6.1	-57.7	-1.7
13221	Oglethorpe	Manufacturing	7.2	-3.7	1.9	-20.0	20.7
13221	Oglethorpe	Retail trade	6.3	-5.2	16.9	-38.4	7.0
13221	Oglethorpe	Services	2.5	1.5	3.7	-70.9	-1.5
13221	Oglethorpe	Transportation and public utilities	9.5	-31.7	7.0	-59.2	383.9
13221	Oglethorpe	Wholesale trade	32.4	-36.7	9.7	-2.9	-3.7
13221	Oglethorpe	Government and government enterprises	3.3	-1.3	4.1	-7.0	3.4
13223	Paulding	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	25.8
13223	Paulding	Construction&mining	20.9	9.1	9.2	-45.2	16.1
13223	Paulding	Finance, insurance, and real estate	0.8	9.0	9.9	-56.6	-0.5
13223	Paulding	Manufacturing	-6.4	-1.3	28.7	16.2	-0.1
13223	Paulding	Retail trade	7.8	16.9	8.7	-17.8	18.3
13223	Paulding	Services	6.9	4.6	6.9	-68.2	44.8
13223	Paulding	Transportation and public utilities	38.2	7.0	-5.7	-31.3	11.7
13223	Paulding	Wholesale trade	10.8	-15.3	-14.5	-13.8	4.1
13223	Paulding	Government and govt. enterprises	8.1	5.4	7.4	-3.6	-1.7
13229	Pierce	Ag. serv., forestry, fishing, and other	22.0	4.0	-11.5	350.0	-8.1

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13229	Pierce	Finance, insurance, and real estate	6.3	3.6	6.5	-47.0	35.2
13229	Pierce	Manufacturing	-12.2	8.0	-12.3	-3.8	2.8
13229	Pierce	Retail trade	2.1	10.9	15.3	-25.1	-9.6
13229	Pierce	Services	1.0	-5.3	7.6	-58.4	-5.5
13229	Pierce	Transportation and public utilities	13.7	10.8	11.7	-19.4	-0.7
13229	Pierce	Wholesale trade	4.9	6.2	5.8	-17.6	12.0
13229	Pierce	Government and government enterprises	2.4	2.1	2.5	-1.4	1.8
13233	Polk	Ag. serv., forestry, fishing, and other	18.6	12.0	12.9	-58.1	15.8
13233	Polk	Construction&mining	NA	NA	NA	NA	50.6
13233	Polk	Finance, insurance, and real estate	6.3	5.9	5.2	-49.7	1.8
13233	Polk	Manufacturing	-6.5	-8.2	-12.2	0.5	-1.9
13233	Polk	Retail trade	5.7	-0.8	1.4	-21.3	2.6
13233	Polk	Services	3.1	4.9	19.4	-46.2	11.1
13233	Polk	Wholesale trade	4.0	-6.7	19.4	-24.7	30.6
13233	Polk	Government and government enterprises	-2.0	-0.4	-1.4	-5.2	-2.4
13239	Quitman	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	-15.6
13239	Quitman	Construction&mining	5.9	0.0	11.1	NA	NA
13239	Quitman	Finance, insurance, and real estate	NA	NA	NA	NA	NA
13239	Quitman	Manufacturing	13.2	18.6	33.3	-17.6	2.7
13239	Quitman	Retail trade	12.9	17.7	1.1	-37.2	-14.7
13239	Quitman	Services	NA	NA	NA	NA	50.0
13239	Quitman	Transportation and public utilities	NA	NA	NA	NA	NA
13239	Quitman	Wholesale trade	NA	NA	NA	NA	NA
13239	Quitman	Government and government enterprises	-0.8	1.6	-0.8	-3.1	3.0
13241	Rabun	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	49.7
13241	Rabun	Construction&mining	8.2	2.1	6.3	-51.1	30.8
13241	Rabun	Finance, insurance, and real estate	-2.8	4.3	-11.8	-50.1	37.6
13241	Rabun	Manufacturing	17.0	-5.2	1.1	-3.9	4.7
13241	Rabun	Retail trade	6.5	-0.1	2.4	-20.9	11.3
13241	Rabun	Services	4.0	2.9	5.2	-36.6	-13.0
13241	Rabun	Transportation and public utilities	8.8	4.0	-3.9	-26.3	2.0
13241	Rabun	Wholesale trade	-5.0	-9.2	-4.3	-28.8	-6.3
13241	Rabun	Government and govt. enterprises	1.1	5.8	4.7	-4.2	2.7
13243	Randolph	Ag. serv., forestry, fishing, and other	41.2	-33.3	31.3	85.7	-12.7
13243	Randolph	Construction&mining	-6.1	20.4	5.4	-40.9	-57.4
13243	Randolph	Finance, insurance, and real estate	-6.5	6.0	8.5	-44.3	-2.0
13243	Randolph	Manufacturing	-5.3	-1.7	-5.3	-22.8	6.6
13243	Randolph	Retail trade	0.8	8.6	-1.5	-18.6	5.4
13243	Randolph	Services	3.5	-1.1	2.1	-56.5	-3.8
13243	Randolph	Transportation and public utilities	9.2	54.9	17.3	-17.8	15.1

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13243	Randolph	Government and government enterprises	3.2	2.7	-1.0	-8.4	-1.0
13245	Richmond	Ag. serv., forestry, fishing, and other	-0.8	4.9	0.2	-32.8	1.7
13245	Richmond	Construction&mining	-3.3	20.0	7.6	-18.9	10.8
13245	Richmond	Finance, insurance, and real estate	4.3	-10.2	1.5	-41.7	-2.1
13245	Richmond	Retail trade	2.7	0.3	-1.1	-10.4	1.2
13245	Richmond	Services	3.0	2.0	1.7	-21.5	2.9
13245	Richmond	Transportation and public utilities	2.3	7.8	8.0	-15.6	9.8
13245	Richmond	Wholesale trade	3.8	2.6	-5.0	-15.6	-3.5
13245	Richmond	Government and government enterprises	0.2	-1.6	3.6	-28.6	-0.6
13251	Screven	Ag. serv., forestry, fishing, and other	6.4	9.4	0.0	-20.3	10.6
13251	Screven	Construction&mining	14.0	1.0	13.2	-46.6	5.4
13251	Screven	Finance, insurance, and real estate	6.5	8.2	-0.9	-46.2	0.9
13251	Screven	Manufacturing	-5.6	-18.6	-8.0	-7.0	-7.1
13251	Screven	Retail trade	13.4	1.8	5.3	-23.3	-1.9
13251	Screven	Services	7.4	0.6	-0.6	-56.5	-4.0
13251	Screven	Transportation and public utilities	9.6	8.2	6.1	-30.5	32.2
13251	Screven	Wholesale trade	45.6	0.8	-31.1	-29.7	-10.5
13251	Screven	Government and government enterprises	-2.3	-0.2	1.0	-4.9	-0.3
13253	Seminole	Ag. serv., forestry, fishing, and other	79.4	-20.8	-3.9	NA	NA
13253	Seminole	Construction&mining	38.1	-0.7	2.8	-77.7	-25.4
13253	Seminole	Finance, insurance, and real estate	5.3	6.9	3.9	-49.2	-24.7
13253	Seminole	Manufacturing	-1.5	-6.7	-2.0	-0.4	7.7
13253	Seminole	Retail trade	2.3	2.7	-1.2	-28.6	5.5
13253	Seminole	Services	-6.7	5.5	4.7	-43.2	5.1
13253	Seminole	Transportation and public utilities	16.0	9.2	0.5	-25.7	-6.8
13253	Seminole	Wholesale trade	1.0	7.2	-0.5	-15.9	-0.4
13253	Seminole	Government and government enterprises	4.4	0.8	1.1	-5.2	1.0
13257	Stephens	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	11.2
13257	Stephens	Construction&mining	11.6	3.9	-2.6	-38.0	2.6
13257	Stephens	Finance, insurance, and real estate	4.1	17.1	0.9	-38.6	19.2
13257	Stephens	Manufacturing	-0.6	-7.5	0.1	1.8	-15.2
13257	Stephens	Retail trade	5.5	7.4	-5.9	-26.2	10.8
13257	Stephens	Services	7.4	2.5	3.1	-50.8	7.3
13257	Stephens	Transportation and public utilities	-36.7	1.6	7.3	-14.5	-44.0
13257	Stephens	Wholesale trade	8.8	2.6	-4.4	-20.2	9.7
13257	Stephens	Government and government enterprises	0.5	1.9	1.5	-4.9	2.9
13259	Stewart	Ag. serv., forestry, fishing, and other	43.9	8.5	12.5	-2.8	-1.1

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13259	Stewart	Finance, insurance, and real estate	-2.6	2.6	0.0	0.0	4.5
13259	Stewart	Manufacturing	11.6	4.2	10.7	-9.2	-33.5
13259	Stewart	Retail trade	7.7	-2.7	1.4	-7.3	15.8
13259	Stewart	Services	1.0	1.3	6.8	-35.5	-3.9
13259	Stewart	Transportation and public utilities	9.4	-2.9	-2.9	-66.7	-26.7
13259	Stewart	Wholesale trade	8.0	3.7	-1.8	-67.3	-9.5
13259	Stewart	Government and government enterprises	-3.3	0.3	-0.9	-9.3	-3.1
13263	Talbot	Ag. serv., forestry, fishing, and other	15.4	0.0	20.0	5.6	-19.3
13263	Talbot	Construction&mining	-1.5	10.1	1.4	-26.1	3.7
13263	Talbot	Finance, insurance, and real estate	NA	NA	NA	NA	28.5
13263	Talbot	Manufacturing	131.4	-7.4	12.0	NA	NA
13263	Talbot	Retail trade	-3.5	0.7	11.5	-40.6	1.4
13263	Talbot	Services	2.6	7.7	-0.4	-74.9	-19.4
13263	Talbot	Transportation and public utilities	-64.7	11.1	12.5	NA	NA
13263	Talbot	Wholesale trade	NA	NA	NA	NA	NA
13263	Talbot	Government and government enterprises	-5.9	0.3	-3.1	-7.8	4.2
13265	Taliaferro	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	NA
13265	Taliaferro	Construction&mining	-46.8	-16.0	0.0	NA	NA
13265	Taliaferro	Finance, insurance, and real estate	NA	NA	NA	NA	NA
13265	Taliaferro	Manufacturing	0.0	0.0	-9.5	NA	NA
13265	Taliaferro	Retail trade	-26.1	73.5	5.1	-22.6	-2.8
13265	Taliaferro	Services	0.0	11.1	1.3	-85.2	83.0
13265	Taliaferro	Transportation and public utilities	NA	NA	NA	NA	NA
13265	Taliaferro	Wholesale trade	7.1	-6.7	NA	NA	NA
13265	Taliaferro	Government and government enterprises	8.2	-1.9	4.8	-2.8	3.1
13275	Thomas	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	-5.9
13275	Thomas	Construction&mining	19.1	3.0	-8.2	-43.4	-5.6
13275	Thomas	Finance, insurance, and real estate	5.7	6.4	11.5	-45.1	-1.1
13275	Thomas	Manufacturing	1.5	4.4	0.6	-3.9	-14.5
13275	Thomas	Retail trade	7.2	3.6	-2.4	-14.5	6.6
13275	Thomas	Services	7.5	4.5	3.1	-27.0	26.2
13275	Thomas	Transportation and public utilities	-19.9	4.9	1.4	-27.7	6.5
13275	Thomas	Wholesale trade	5.6	-6.0	-2.7	-11.0	25.2
13281	Towns	Ag. serv., forestry, fishing, and other	-7.9	14.3	10.0	-43.2	19.0
13281	Towns	Construction&mining	41.9	11.2	-7.5	-69.7	1.6
13281	Towns	Finance, insurance, and real estate	19.2	6.7	10.7	-65.8	4.5
13281	Towns	Manufacturing	9.4	-21.3	-72.3	-46.5	-7.6
13281	Towns	Retail trade	7.0	2.9	10.0	-25.3	9.9
13281	Towns	Services	33.3	10.9	7.3	-28.6	2.7
13281	Towns	Transportation and public utilities	19.3	4.2	3.0	-4.7	13.0

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13281	Towns	Government and government enterprises	-12.7	3.1	4.1	-6.3	3.1
13285	Troup	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	5.3
13285	Troup	Construction&mining	45.3	-18.6	-5.4	-22.0	5.5
13285	Troup	Finance, insurance, and real estate	1.7	4.0	5.2	-43.6	2.6
13285	Troup	Manufacturing	1.5	2.4	2.3	-1.8	4.3
13285	Troup	Retail trade	9.8	5.0	-5.3	-12.1	18.1
13285	Troup	Services	8.2	5.4	4.0	-33.3	3.3
13285	Troup	Transportation and public utilities	8.4	19.0	14.9	20.7	45.4
13285	Troup	Wholesale trade	37.5	14.9	-9.2	-24.2	-27.0
13285	Troup	Government and government enterprises	0.3	3.0	1.0	-4.2	2.0
13291	Union	Ag. serv., forestry, fishing, and other	64.2	NA	NA	NA	NA
13291	Union	Construction&mining	16.5	0.7	1.1	-64.1	12.8
13291	Union	Finance, insurance, and real estate	9.3	8.4	5.4	-56.8	16.2
13291	Union	Manufacturing	-1.9	-19.2	-13.6	-10.8	-3.1
13291	Union	Retail trade	9.5	10.8	6.3	-24.9	10.3
13291	Union	Services	5.2	4.8	6.5	-59.5	16.4
13291	Union	Transportation and public utilities	15.9	27.8	0.9	-21.6	22.4
13291	Union	Wholesale trade	0.0	6.7	-2.2	11.5	12.2
13291	Union	Government and government enterprises	3.4	5.6	7.2	-0.8	3.8
13295	Walker	Ag. serv., forestry, fishing, and other	NA	NA	NA	NA	-1.2
13295	Walker	Construction&mining	14.8	4.7	2.6	-62.0	13.5
13295	Walker	Finance, insurance, and real estate	2.7	5.7	-3.6	-46.9	2.8
13295	Walker	Manufacturing	-5.0	-0.9	-0.5	-4.2	-2.3
13295	Walker	Retail trade	2.4	3.2	-0.2	-28.3	2.4
13295	Walker	Services	5.6	3.6	9.0	-48.4	0.7
13295	Walker	Wholesale trade	0.4	-4.5	11.0	-29.2	38.0
13295	Walker	Government and government enterprises	3.3	3.4	0.1	-7.3	0.4
13299	Ware	Ag. serv., forestry, fishing, and other	-2.9	10.5	7.5	3.8	39.9
13299	Ware	Construction&mining	7.5	16.8	3.3	-7.5	24.9
13299	Ware	Finance, insurance, and real estate	-1.1	1.7	-0.4	-42.6	-2.9
13299	Ware	Manufacturing	1.5	-1.2	-2.1	-6.6	-5.3
13299	Ware	Retail trade	1.5	6.6	-3.4	-9.8	1.2
13299	Ware	Services	3.3	1.3	3.2	-27.8	-1.8
13299	Ware	Transportation and public utilities	-0.2	-4.5	-2.4	-69.2	7.4
13299	Ware	Wholesale trade	6.0	0.6	-2.0	-2.8	-23.6
13299	Ware	Government and government enterprises	1.7	-1.0	1.1	-5.7	1.0
13307	Webster	Ag. serv., forestry, fishing, and other	9.1	58.3	15.8	150.0	4.1
13307	Webster	Construction&mining	NA	NA	NA	NA	NA

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FIPS	County	Sector	Percent Change 1994-95	Percent Change 1995-96	Percent Change 1996-97	Percent Change 1997-98	Percent Change 1998-99
13307	Webster	Manufacturing	-6.6	-3.9	6.7	-4.4	-0.2
13307	Webster	Retail trade	8.0	3.7	-3.6	NA	NA
13307	Webster	Services	13.3	0.7	1.5	NA	NA
13307	Webster	Transportation and public utilities	18.8	-5.3	-5.6	-14.7	-19.8
13307	Webster	Wholesale trade	13.0	-1.9	7.8	-18.2	-5.4
13307	Webster	Government and government enterprises	4.8	9.1	5.6	-2.6	1.4
13311	White	Ag. serv., forestry, fishing, and other	17.3	3.2	9.2	-37.4	-12.9
13311	White	Construction&mining	1.3	-3.5	-2.2	-59.0	14.1
13311	White	Finance, insurance, and real estate	6.5	4.0	10.9	-71.5	18.4
13311	White	Manufacturing	-7.9	36.0	-3.7	-4.4	-12.2
13311	White	Retail trade	13.8	-6.3	2.7	-23.2	12.5
13311	White	Services	9.4	3.1	5.7	-42.3	6.3
13311	White	Transportation and public utilities	9.5	4.6	7.3	-46.4	-2.7
13311	White	Wholesale trade	44.9	-4.9	-22.7	-48.7	-32.1
13311	White	Government and government enterprises	3.8	5.0	0.8	-12.2	1.7
13313	Whitfield	Ag. serv., forestry, fishing, and other	0.0	NA	NA	NA	5.5
13313	Whitfield	Construction&mining	-0.5	-2.8	-1.3	-34.4	6.8
13313	Whitfield	Finance, insurance, and real estate	7.4	2.1	0.3	-39.5	-0.5
13313	Whitfield	Retail trade	10.9	1.9	7.8	-15.9	-1.0
13313	Whitfield	Services	0.9	4.9	0.1	-31.3	9.5
13313	Whitfield	Transportation and public utilities	2.9	7.1	6.3	-11.9	-14.1
13313	Whitfield	Wholesale trade	15.8	5.8	-9.4	-10.8	-5.6
13313	Whitfield	Government and government enterprises	-0.2	3.9	2.8	-3.5	1.1
13317	Wilkes	Ag. serv., forestry, fishing, and other	-13.6	7.1	16.0	-16.1	17.3
13317	Wilkes	Construction&mining	12.0	5.4	-1.4	-52.6	8.4
13317	Wilkes	Finance, insurance, and real estate	7.4	2.5	5.8	-35.0	-2.8
13317	Wilkes	Manufacturing	8.8	-2.8	7.6	-1.7	-1.3
13317	Wilkes	Retail trade	1.0	1.2	6.4	-27.3	10.3
13317	Wilkes	Services	2.6	8.0	4.9	-54.0	3.6
13317	Wilkes	Transportation and public utilities	-1.2	2.5	8.0	-17.0	1.5
13317	Wilkes	Wholesale trade	0.5	0.5	-48.8	-8.9	-4.1
13317	Wilkes	Government and government enterprises	0.3	-1.8	-1.5	-5.4	-1.8

About The Author

Saloua Sehili is Principal Associate with the Fiscal Research Program. She holds a Ph.D. in Economics from the Andrew Young School of Policy Studies, Georgia State University, an MS in Health Systems from the Georgia Institute of Technology, and a BS in Industrial Engineering from Iowa State University. Her primary areas of research are in public finance, urban and regional economics, and industrial organization.

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